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# EMPLOYMENT INJURIES NEW SOUTH WALES 1986-87



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# EMPLOYMENT INJURIES NEW SOUTH WALES 1986-87

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Deputy Commonwealth Statistician

AUSTRALIAN BUREAU OF STATISTICS SYDNEY

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INQUIRIES If you would like to obtain further information about these statistics, please ring Etel Hammond-Roldan on (02) 268 4408; contact ABS Information Services on (02) 268 4611, at level 3, St. Andrew's House, Sydney Square, Sydney; or write to Information Services, Australian Bureau of Statistics, Box 796 GPO, Sydney 2001.

	CONTENTS	Page
Introduct		v vii
Explanat	cory Notes	VII
	SECTION 1. EMPLOYMENT INJURIES:SUMMARY	
Commen	ntary	1
Tables		
	Employment injuries:	
	Type of occurrence by sex, N.S.W., 1982-83 to 1986-87	3
1.1	Type of occurrence by Sex, N.S. W., 1962-65 to 1960-67	3
1.2	Type of occurrence by extent of disability and sex, N.S.W., 1982-83 to 1986-87	4
1.3	Number and incidence by industry, N.S.W., 1983-84 to 1986-87	5
1.4	Number and incidence by occupation, N.S.W., 1983-84 to 1986-87	6
1.5	Number and incidence by industry, type of occurrence and extent of disability, N.S.W., 1986-87	8
1.6	Occupation by type of occurrence and extent of disability, N.S.W., 1986-87	8
1.7	Industry summary table: Workplace injuries and occupational diseases by number, incidence	••
	and relative standard error, N.S.W., 1986-87	10
1.8	Occupation summary table: Workplace injuries and occupational diseases, N.S.W., 1985-86 to 1986-87	12
	COCCONON A WORKER ACE INTIDIES	
	SECTION 2. WORKPLACE INJURIES	15
Comme	ntary	15
Tables		
	Workplace injuries:	
2.1	Number and incidence by industry, extent of disability and sex, N.S.W., 1986-87	18
2.2	Occupation by extent of disability and sex, N.S.W., 1986-87	20
2.3	Industry by occupation, N.S.W., 1986-87	22
2.4	Industry by agency of accident, N.S.W., 1986-87	24
2.5	Occupation by agency of accident, N.S.W., 1986-87	26
2.6	Nature of injury by type of accident, N.S.W., 1986-87	26
2.7	Type of accident by agency of accident, N.S.W., 1986-87	28
2.8	Nature of injury by agency of accident, N.S.W., 1986-87	28
2.9	Nature of injury by bodily location of injury, N.S.W., 1986-87	30
	Extent of disability by age group and sex, N.S.W., 1986-87	30
2.10	Extent of disability by age group and sex, 14.5. w., 1380-67	50
	SECTION 3. ROAD TRAFFIC ACCIDENT INJURIES	
	SECTION 5. RUAD TRAFFIC ACCIDENT INJURIES	
Comme	ntary	31
Tables		
	Road traffic accident injuries:	32
3.1	Number and incidence by industry, extent of disability and sex, N.S.W., 1986-87	
3.2	Occupation by extent of disability and sex, N.S.W., 1986-87	33
3.3	Nature of injury by sex, N.S.W., 1986-87	34
3.4	Age group by sex, N.S.W., 1986-87	34

# CONTENTS (continued)

	SECTION 4. OCCUPATIONAL DISEASES	Page
Comm	nentary	35
Tables	•	
	Occupational diseases:	
4.1	Number and incidence by industry, extent of disability and sex, N.S.W., 1986-87	38
4.2	Occupation by extent of disability and sex, N.S.W., 1986-87	40
4.3	Industry by occupation, N.S.W., 1986-87	42
4.4	Industry by nature of disease and sex, N.S.W., 1986-87	44
4.5	Occupation by nature of disease and sex, N.S.W., 1986-87	48
4.6	Extent of disability by age group and sex, N.S.W., 1986-87	52
	SECTION 5. EMPLOYMENT INJURIES: SEVERITY	
Comm	entary	53
Tables		
	Injuries by accident:	
5.1	New cases resulting in a temporary disability - industry by duration of period off work	57
	and average period off work, N.S.W., 1986-87	57
5.2	New cases resulting in a temporary disability - occupation by duration of period off work and average period off work, N.S.W., 1986-87	58
	Occupational diseases:	
5.3	New cases resulting in a temporary disability - industry by duration of period off work	
	and average period off work, N.S.W., 1986-87	59
5.4	New cases resulting in a temporary disability - occupation by duration of period off work	
	and average period off work, N.S.W., 1986-87	60
5.5	New cases resulting in a temporary disability - nature of disease by duration of period off work and average period off work, N.S.W., 1986-87	61
	Employment injuries:	
5.6	New cases - industry by type of occurrence and total and average compensation	(0)
5.7	payments, N.S.W., 1986-87  Year of payment - industry by type of occurrence and total and average compensation	62
J.1	payments, N.S.W., 1986-87	63
	Technical Note 1 - Calculation of the incidence of employment injuries	64
	Technical Note 2 - Reliability of the data	65

#### INTRODUCTION

This is the third issue of 'Employment Injuries' for N.S.W. The first provided detailed information for each of the years 1982-83 to 1984-85, while the second presented data for 1985-86. The current issue relates predominantly to the year 1986-87, although summary data for earlier years is provided in Section 1.

Explanatory notes cover the source and scope of the data, the definitions and classifications used, and other matters necessary for the proper understanding of the statistics. Additionally, technical notes have been included at the end of the publication to explain the calculation of the incidence of employment injuries and to discuss some of the issues affecting the reliability of the data.

The principal statistics presented are summarised in Section 1. Section 2 deals with injuries arising from workplace accidents; Section 3 with injuries arising from road traffic accidents; and Section 4 with occupational diseases. The final section covers the

severity of employment injuries in terms of period off work and compensation paid during 1986-87, both for new cases and for all cases.

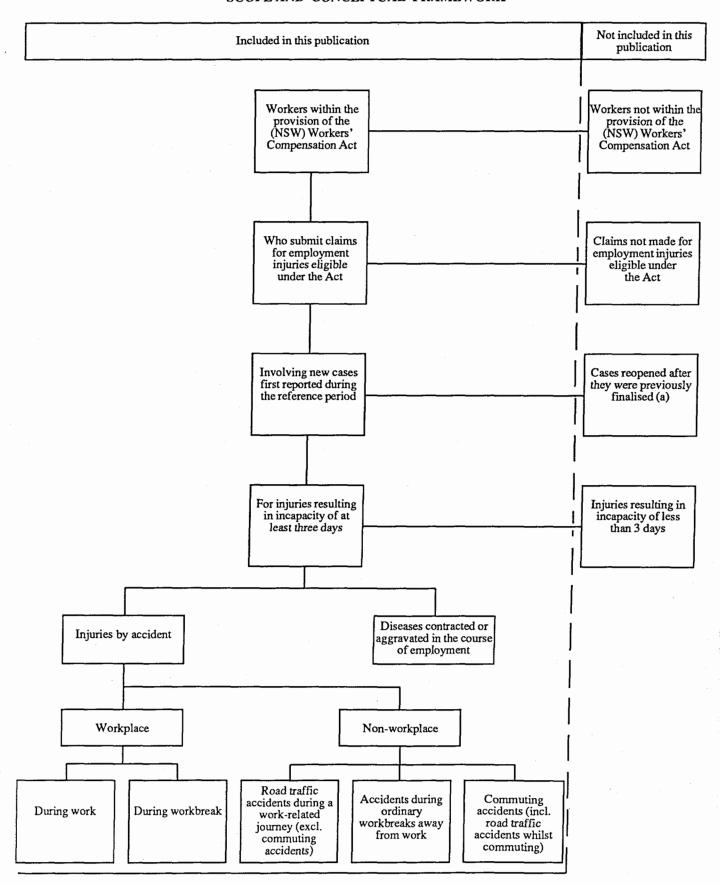
The scope of the statistics is limited to that of the (N.S.W.) Workers' Compensation Act, as they are based on claims made under that Act for compensable injuries which resulted in, or were expected to result in, three or more days of incapacity for work. In contrast to similar statistics for other States, they are thus based on year of report, rather than date of occurrence. Notable exclusions from the N.S.W. statistics are Commonwealth Government, State Rail Authority and Urban Transit Authority employees, the N.S.W. Police Force, most self-employed persons and certain other groups not covered by the (N.S.W.) Workers' Compensation Act.

Users who have particular data requirements not covered by the material in this publication are invited to discuss these with Etel Hammond-Roldan, Manager, Social Statistics (02) 268 4408.

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Deputy Commonwealth Statistician

December 1988

# EMPLOYMENT INJURIES STATISTICS SCOPE AND CONCEPTUAL FRAMEWORK



<sup>(</sup>a) Except for Table 5.7, which includes all cases for which a payment was made in the reference year.

#### **EXPLANATORY NOTES**

The statistics on employment injuries in this publication have been compiled by the ABS from claims lodged with insurers and self insurers under the (N.S.W.) Workers' Compensation Act 1926. The information concerned is initially reported to the State Compensation Board and then passed to the ABS for processing.

#### Scope

- 2. The statistics relate to claims made under the Workers' Compensation Act which resulted in, or are expected to result in, three or more days of incapacity for work. This includes all fatalities and permanent disabilities as well as the temporary disabilities that satisfy the incapacity for work criterion.
- 3. As the diagram opposite shows, the statistics in this publication do not provide a complete record of all work-related injuries and diseases affecting New South Wales workers. They exclude:
  - (a) injuries and diseases sustained by the following employees who are excluded from the Workers' Compensation Act:
    - members of the police force,
    - casual workers employed for one period only of not more than five working days and who are employed other than for the purposes of the employer's trade or business;
  - (b) injuries and diseases sustained by other persons to whom the provisions of the Act do not apply. These include:
    - most self-employed persons,
    - employees of the Australian Government,
    - injuries sustained by employees of the N.S.W. State Rail Authority and Urban Transit Authority, where the claim for compensation was made under the N.S.W. Transport Authorities Act 1980, and
    - employees suffering from diseases caused by the inhalation of dust (except in coal mining) as provision for compensation in these cases is made under other Acts;
  - (c) injuries and diseases for which no claim was made under the Act;
  - (d) injuries and diseases compensable under the Act, but which did not result in incapacity to work of at least three days; and
  - (e) injuries and diseases for which cases were reopened after they had previously been finalised, regardless of whether the case was reopened in the reference year. The only exception to this is Table 5.7: while all other data included in this publication relate to new cases (as defined in Explanatory Note 11 below), the data in Table 5.7 are based on the year of payment (as defined in Explanatory Note 12 below).

#### **Definitions**

- 4. The definitions in this publication conform closely to those recommended by the International Labour Organisation (ILO).
- 5. Employment injuries cover all injuries resulting from accidents, and all occupational diseases contracted or aggravated in the course of a worker's employment.
  - (a) Injury by accident is an employment injury resulting from workplace and non-workplace accidents.
  - (b) Occupational disease is an employment injury distinguishable from an injury by accident by one or more of the following characteristics:
    - the slow and protracted nature of its cause;
    - it is ascribable to repeated or continuous action of a mechanical, physical or chemical nature and is not the effect of a single event but of a cause acting imperceptively and constantly;
    - the uncertain time of its beginning; and
    - there is a possible individual pre-disposition to the development of the condition.
- 6. Injuries by accident may be classified as:
  - (a) workplace injuries caused by accidents occurring at the workplace either during work or during a workbreak. These include all accidents occurring on the premises at which the worker is employed. They also include any accidents on work-related journeys not covered under 6 (b) below; or
  - (b) non-workplace injuries caused by accidents occurring away from the workplace. These comprise:
    - road traffic accidents, other than those which occur whilst commuting, involving a motor vehicle, bicycle, or other vehicle on a public highway or street, but not on roads in airfields, farms, industrial premises, etc., and driveways or parking lots;
    - accidents during workbreaks away from the workplace; and
    - commuting accidents which occur during travel between residence and workplace, to educational institutions for training associated with the worker's employment, or for medical treatment for a compensable injury, etc. This includes road traffic accidents which occur whilst commuting.
- 7. The extent of disability relates to the long-term effect of the employment injury (as known by the insurer at the time of completing the statistical return). This is classified to one of the following categories:
  - (a) fatal employment injuries are those which result in the death of the injured worker. This category comprises cases where a worker is killed at work

and cases where a worker subsequently dies of injuries received at work (except where the injury had previously been advised to the State Compensation Board as being non-fatal);

- (b) permanent total disability refers to an employment injury which results in a worker being considered to be totally and permanently incapacitated for any type of work;
- (c) permanent partial disability refers to the partial or complete loss of, or loss of the use of, any part of the body or faculty, as a result of which the person's earning capacity or opportunities for employment are permanently affected, although he or she is still able to work; or
- (d) temporary disability refers to an employment injury which does not result in death or a permanent disability.
- 8. The *incidence* of employment injuries is the number of employment injuries expressed as a rate per 1,000 workers exposed to risk. The method of calculating incidence is detailed in Technical Note 1 on page 64.
- 9. Age is the age of the worker at the time of the accident for accident cases, but the age at the time the injury was first reported for disease cases.
- 10. Industry is the industry of the establishment at which the worker was employed at the time of the injury for accident cases or at the time of first reporting for disease cases. (See paragraph 15 below for details of the industry classification used.)
- 11. New cases are employment injuries first reported to the State Compensation Board during the reference year.
- 12. Year of payment data relate to all employment injuries in respect of which a compensation payment was made during the reference year. This includes cases that were first reported to the State Compensation Board before the 1986-87 year.
- 13. Total compensation payments relate to all lump sum and weekly payments made for employment injuries, including payments for medical, hospital and ambulance expenses, for damage to clothing and artificial aids, for transport and maintenance expenses, for damages and legal costs at common law, for investigation expenses and for the legal costs of the compensation claim. For new cases, total compensation payments comprise payments made during the year plus an estimate of future liability provided by the insurer. For year of payment data, total compensation payments comprise all of the above payments made in respect of the injury during the reference year.
- 14. Period off work relates to the number of calendar days for which the injured worker was not fit for work. For new cases, it comprises the actual period off work from the time of the injury to the end of the reference period plus an estimate of the future period off work based on an estimated date, by the insurer, of when the worker will be fit to resume work. Average period off work is the total period off work divided by the number of injuries. A small number of injuries have periods off work greater than 10,000 calendar days (i.e. in excess of 27 years). These are not included in the average period off work data.

#### Classifications

- 15. Industry classification. The classification of industry is in accordance with the Australian Standard Industrial Classification (1983 Edition), Vol. 1 The Classification (1201.0).
- 16. Occupation classification. Injury cases are classified to an occupation in accordance with the Classification and Classified List of Occupations, Australia (Revised, June 1981) (1206.0). However, the data on number of workers which are used to calculate incidence are obtained from the monthly labour force survey (see Technical Note 1 on page 64). Since August 1986, occupation in the labour force survey has been classified according to the Australian Standard Classification of Occupations (ASCO) 1986. Given the differences between the two classifications, separate occupation incidence statistics have not been calculated for 1986-87. (For an explanation of ASCO and the link between ASCO and CCLO, see The Labour Force, Australia, August 1986 (6203.0).)
- 17. Agency and Type of Accident and Bodily Location of Injury classifications. The classifications of agency of accident, type of accident and bodily location of injury are based on the classifications recommended by the ILO.
- 18. Nature of Disease and Nature of Injury classifications. The classifications of nature of disease and nature of injury are based on the Ninth Revision (1975) of the World Health Organisation's International Statistical Classification of Diseases, Injuries, and Causes of Death.

#### Comparability of data

- 19. A new case may be reported to the State Compensation Board after the end of the referenc year in which it occurred. Hence the statistics for 1986-87, for example, may include injuries that occurred in 1985-86 and exclude some that happened towards the end of 1986-87. Variations in the average time elapsed between occurrence and notification of injuries can result in artificial changes in the employment injuries statistics (and therefore in incidence) from one year to the next. This was known to be a significant problem between 1982-83 and 1983-84, and should be borne in mind when interpreting changes in the statistics across years.
- 20. Where significant movements in incidence occur from one year to the next, this could be attributable to changes in the labour force survey data. These could in turn be due to:
  - (a) real changes;
  - (b) sampling error; and/or
  - (c) non-sample error.

Potential sources of error affecting these statistics are discussed in Technical Note 2 on page 65. Table 1.7 includes relative standard errors (RSEs) applicable to the incidence figures for detailed industry categories. RSEs associated with broad level industry incidence figures are shown in a separate table in Technical Note 2.

#### Discontinuity in the series

21. 1986-87 incidence statistics are not strictly comparable with those published in previous years, as certain industries previously included, were this year excluded from the incidence calculations. This applies to the categories 'Rail

transport', 'Services to air transport' and 'Communication' where most employees are not covered under the provisions of the (N.S.W.) Workers' Compensation Act.

22. Between 1983-84 and 1985-86 some injuries were coded to the industry category 'Engineering, type not specified', because the industry description provided was not sufficiently detailed. Efforts to improve the quality of the industry data supplied on workers' compensation claim forms resulted in all injuries being able to be allocated a specific code in 1986-87. For this reason, the category 'Engineering, type not specified' no longer appears on the industry tables.

#### Related publications

23. Users may also wish to refer to the following related publications which are available on request:

Australian Health Survey: Outline of Concepts, Methodology and Procedures Used (4323.0)

Australian Health Survey: Medical and Other Conditions Reported (4356.0)

Australian Health Survey: Consequences of Illnesses (4357.0)

Australian Health Survey: Action Taken (4358.0)

A Guide to Labour Statistics (6102.0)

24. A list of the complete range of publications available from the ABS can be obtained from any ABS Office.

Access to a wide range of ABS statistics is also available through the VIATEL videotex system and on AUSSTATS, ABS' on-line service through CSIRONET. Further information about these services can be obtained from the Sydney ABS Information Service on (02) 268 4611, or from any ABS Office.

#### Symbols and other usages

n.a. not available

n.e.c. not elsewhere classified

.. not applicable

nil or rounded to zero

\* estimates preceded by an \* are subject to a relative standard error of between 25 and 50 per cent. Estimates replaced by \*\* are subject to sampling variability too high for most practical purposes. (See Technical Note 2 on page 65.)

25. Where figures have been rounded, discrepancies may occur between sums of the component items and the totals shown.

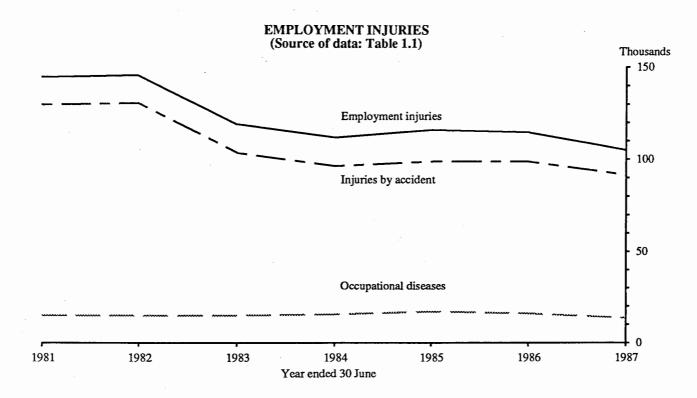
## **SECTION 1**

# **EMPLOYMENT INJURIES: SUMMARY**

#### **EMPLOYMENT INJURIES**

# All employment injuries 1982-83 to 1986-87 (see Table 1.1)

In 1986-87, 104,933 employment injuries were reported, the majority (91,423) arising from accidents. This represents a decrease of 9,500 (or a little over 8 per cent) over the 1985-86 figure for all employment injuries: the number of injuries resulting from an accident fell by 7 per cent, while cases of occupational disease fell by 16 per cent over this period.



Over the longer term, the data for males and females reveal quite different trends. While the number of both injuries by accident and occupational diseases among males has been steadily decreasing since 1982-83, the equivalent figures for females showed an increasing trend between 1982-83 and 1985-86, and then decreased in 1986-87. Over the last four years, the ratio of injuries by accident to occupational diseases has been substantially higher among male than female workers.

Most employment injuries occur at the workplace during work, rather than when commuting and during workbreaks. In 1986-87, accidents occurring during work accounted for approximately 76 per cent of all employment injuries reported, slightly more than was the case in 1985-86 (75 per cent). This constitutes a change from past trends, in that every year since 1982-83 the proportion of employment injuries attributable to accidents during work had decreased. Over that period, the number of such injuries suffered by males decreased by 17 per cent, while injuries to females in the same circumstances increased by 3 per cent.

## Extent of disability (see Table 1.2)

In 1986-87 there were 154 accident fatalities, 35 less than in the previous year, and 53 deaths due to occupational diseases, 5 less than in the previous year. All categories of non-fatal employment injuries also fell in 1986-87. The largest fall occurred in temporary disabilities to males as a result of accidents, which decreased by more than 7 per cent of the 1985-86 figure.

Over the period 1982-83 to 1986-87, 98 per cent of injuries by accident led to a temporary disability. While the proportion of injuries by accident leading to a temporary disability has remained relatively stable over this time, the equivalent proportion among cases of occupational disease increased dramatically, from 37 per cent to 55 per cent. Despite this, occupational diseases continue to be more likely to result in permanent disabilities than injuries resulting from accidents.

There is also a marked difference between male and female workers as far as the consequences of employment injuries are concerned. Among females, 88 per cent of occupational disease cases reported in 1982-83 resulted in a temporary disability. By 1986-87, this had risen to 93 per cent. Over the same period, permanent partial disabilities had fallen from 12 to 7 per cent of cases. Among males, by contrast, most occupational diseases led to a permanent partial disability, although the proportion has declined from 75 per cent in 1982-83 to 61 per cent in 1986-87.

#### Incidence by industry (see Table 1.3)

In the period 1983-84 to 1986-87, the Coal mining industry consistently had the highest incidence of employment injuries, with rates ranging from 335 injuries per thousand workers in 1984-85 to just under 300 injuries per thousand workers in 1986-87. These rates were about 5 times the rate for all industries.

Other industries with high rates of injury in the same period were Other mining, which fell from 215 to 143 injuries per thousand workers, and Construction, down from 165 to 123 injuries per thousand workers. The two industries with the lowest rates were Education, museum and library services (which ranged from 15 to 21 injuries per thousand workers) and Finance, property and business services (19 to 23).

#### Occupation (see Table 1.4)

Separate incidence by occupation is not available for 1986-87 (see Explanatory Note 16). However, the *number* of employment injuries reported in 1986-87 fell in all broad occupation categories. The most significant decreases since 1985-86 occurred among Administrative, executive, managerial and clerical workers (a fall of 18 per cent) followed by Farmers, fishermen, timbergetters and related workers (11 per cent).

#### WORKPLACE INJURIES AND OCCUPATIONAL DISEASES

#### Incidence by industry (see Table 1.7)

During 1986-87, the Non-building construction industry recorded the highest incidence of workplace injuries, with 269 injuries per thousand workers. This was over 6 times the State average of 43 injuries per thousand workers. Other high risk industries included: Coal mining (266 per thousand workers), Basic non-ferrous metals manufacture (143 per thousand workers), and Meat products manufacture (also 143 per thousand workers). On the other hand, the lowest risk industry was Other health and veterinary services, with an incidence of 3 injuries per thousand workers, less than one tenth of the State average. Hairdressers and beauty salons, Finance and investment and Insurance and services to insurance were also low risk industries, with rates between 4 and 5 injuries per thousand workers.

The highest incidence of occupational diseases in 1986-87 occurred in the Mining of metallic minerals, with 54 cases per thousand workers. Meat products manufacturing was next highest, with 42 cases per thousand workers, followed by Basic chemicals manufacturing with 35 per thousand workers. Industries with the lowest risk of occupational disease included Other health and veterinary services, Other retailers, and Welfare and religious institutions, with rates of between 1 and 2 cases per thousand workers.

TABLE 1.1 EMPLOYMENT INJURIES: TYPE OF OCCURRENCE BY SEX, N.S.W.

			Injuries b	y accident				
	Workpla	ce injuries	Nor	ı-workplace in	ijuries	Total injuries by accident	Occup- ational diseases	
Year ended 30 June	During work	During work break	Road traffic accidents	During work break	Commuting accidents			Employment injuries
				MALES				
1983 1984 1985 1986 1987	77,829 70,936 71,717 70,078 64,810	312 305 297 329 353	1,045 1,139 1,109 1,304 1,139	315 302 317 323 239	6,465 5,893 6,142 6,375 5,989	85,966 78,575 79,582 78,409 72,530	11,975 11,616 11,317 10,097 9,442	97,941 90,191 90,899 88,506 81,972
				FEMALES				
1983 1984 1985 1986 1987	13,918 13,702 14,884 15,365 14,327	167 166 151 180 184	197 219 224 324 308	182 166 178 193 175	3,497 3,357 3,609 3,955 3,899	17,961 17,610 19,046 20,017 18,893	2,912 3,805 5,743 5,920 4,068	20,873 21,415 24,789 25,937 22,961
				PERSONS				
1983 1984 1985 1986 1987	91,747 84,638 86,601 85,443 79,137	479 471 448 509 537	1,242 1,358 1,333 1,628 1,447	497 468 495 516 414	9,962 9,250 9,751 10,330 9,888	103,927 96,185 98,628 98,426 91,423	14,887 15,421 17,060 16,017 13,510	118,814 111,606 115,688 114,443 104,933

TABLE 1.2 EMPLOYMENT INJURIES: TYPE OF OCCURRENCE BY EXTENT OF DISABILITY AND SEX, N.S.W.

		Inj	uries by acci	dent		Occupational diseases					
Year ended 30 June		Permane	nt disability	Temp- orary	Total injuries by accident		Permaner	nt disability	Temp- orary	Total occupational	F
	Fatal	Total	Partial	disab- ility		Fatal	Total	Partial	ility		injuries
					M	ALES					
1983	204	93	1,549	84,120	85,966	77	6	9,003	2,889	11,975	97,941
1984	167	14	1,420	76,974	78,575	68	. 2	8,309	3,237	11,616	90,191
1985	135	15	1,457	77,975	79,582	64	4	7,390	3,859	11,317	90,899
1986	172	6	1,347	76,884	78,409	57	2	6,398	3,640	10,097	88,506
1987	141	4	1,154	71,231	72,530	52	-	5,782	3,608	9,442	81,972
					FE	MALES					
1983	17	19	323	17,602	17,961	1	1	352	2,558	2,912	20,873
1984	. 13	1	270	17,326	17,610	2	-	356	3,447	3,805	21,415
1985	17	4	272	18,753	19,046	2	-	317	5,424	5,743	24,789
1986	17	2	398	19,600	20,017	1	1	407	5,511	5,920	25,937
1987	13	-	191	18,689	18,893	1	-	266	3,801	4,068	22,961
			:		PE	RSONS					
1983	221	112	1,872	101,722	103,927	78	7	9,355	5,447	14,887	118,814
1984	180	15	1,690	94,300	96,185	70	2	8,665	6,684	15,421	111,606
1985	152	19	1,729	96,728	98,628	66	4	7,707	9,283	17,060	115,688
1986	189	8	1,745	96,484	98,426	58	3	6,805	9,151	16,017	114,443
1987	154	4	1,345	89,920	91,423	53		6,048	7,409	13,510	104,933

4

TABLE 1.3 EMPLOYMENT INJURIES: NUMBER AND INCIDENCE(a) BY INDUSTRY, N.S.W.

		Nı	umber			Incidence (a)			
Industry	83-84	84-85	85-86	86-87	83-84	84-85	85-86	86-87	
Agriculture, forestry, fishing & hunting	3,546	3,718	3,271	2,927	82.1	97.7	77.7	79.9	
Mining	9,557	8,704	8,195	7,261	297.6	300.0	*	253.1	
Coal	8,042	7,267	6,803	6,105	321.0	335.3	300.9	296.0	
Other	1,515	1,437	1,392	1,156	214.6	195.8	*	143.4	
Manufacturing	39,836	40,716	37,857	33,447	103.1	104.9	99.5	86.3	
Food, beverages & tobacco	7,201	7,200	6,496	6,177	137.1	135.6	129.3	115.8	
Textiles, clothing & footwear	1,880	2,090	2,014	1,659	58.8	67.4	65.6	47.2	
Wood, wood products & furniture	2,443	2,617	2,300	2,042	103.7	98.4	91.3	87.2	
Paper, paper products, printing & publishing	2,363	2,361	2,269	1,947	56.6	59.1	57.2	45.2	
Chemicals, petroleum & coal products	2,213	2,131	1,819	1,579	85.1	89.2	71.3	63.0	
Non-metallic mineral products	1,848	1,878	1,743	1,554	108.3	123.4	98.8	89.2	
Basic metal products	4,813	4,744	5,073	4,216	(b)118.0	(b)113.6	(b)114.7	107.9	
Engineering, type not specified	1,661	1,872	173	(c)	(b)	(b)	(b)	(c)	
Fabricated metal products	4,010	4,232	4,755	4,283	(b)125.4	(b)127.7	(b)127.7	113.3	
Transport equipment	4,235	4,012	3,581	3,195	(b)160.8	(b)150.5	(b)148.0	88.5	
Other machinery & equipment	5,637	5,919	6,008	5,425	(b)100.3	(b)101.3	(b)99.6	95.6	
Miscellaneous manufacturing	1,532	1,660	1,626	1,370	71.7	87.2	75.1	69.1	
Electricity, gas & water	4,340	4,288	3,928	3,770	83.6	82.0	71.6	77.4	
Construction	14,076	14,567	14,456	13,920	165.0	145.2	132.3	123.1	
Wholesale trade	4,846	4,961	5,388	4,744	39.8	36.6	39.1	34.3	
Retail trade	8,733	9,480	9,338	8,201	38.5	39.8	37.3	32.1	
Transport, storage & communication	6,290	6,443	7,075	7,167	85.8	83.0	85.4	(d)78.7	
Road transport	3,071	3,161	3,188	2,998	90.4	92.6	98.4	75.8	
Other	3,219	3,282	3,887	4,169	81.2	75.1	75.2	(d)81.9	
Finance, property & business services	3,793	4,474	4,612	4,121	19.8	23.0	21.3	18.7	
Public administration & defence	1,667	1,757	2,313	1,962	22.1	25.3	33.3	28.7	
Community services	10,687	11,952	13,601	13,218	34.3	35.1	41.0	36.6	
Health	6,813	7,295	7,976	7,451	50.7	52.4	55.3	51.5	
Education, museum & library services	1,885	2,287	2,744	2,684	14.9	16.4	20.8	17.9	
Other	1,989	2,370	2,881	3,083	39.2	38.6	50.9	46.0	
Recreation, personal & other services	4,211	4,627	4,409	4,195	35.9	41.2	34.8	33.9	
Total	(e)111,606 (d	e)115,688	114,443	104,933	64.7	64.8	61.9	(d)55.4	

<sup>(</sup>a) Number of injuries per 1,000 workers. (b) Injuries in 'Engineering, type not specified' have been included in the categories 'Basic metal products', 'Fabricated metal products', 'Transport equipment' and 'Other machinery and equipment' when calculating incidence. (c) The category 'Engineering, type not specified' is no longer applicable. See Explanatory Note 22. (d) Excludes the industry categories 'Rail transport', 'Services to air transport' and 'Communication', which were included in previous years. This results in a break in the series. See Explanatory Note 21. (e) Includes industries not classified for lack of sufficient data.

TABLE 1.4 EMPLOYMENT INJURIES: NUMBER AND INCIDENCE(a) BY OCCUPATION, N.S.W.

		Nu	nber		Incidence (a)		
Occupation	83-84	84-85	85-86	86-87	83-84	84-85	85-86
Professional, technical & related workers	4,335	4,717	5,282	5,144	14.5	15.3	17.3
Administrative, executive & managerial workers; and clerical workers	6,560	8,007	8,553	7,015	14.2	16.5	16.7
Sales workers	3,953	4,068	3,863	3,754	26.7	25.4	23.5
Farmers, fishermen, timbergetters & related workers	4,439	4,681	4,027	3,572	85.5	99.8	79.2.
Miners, quarrymen & related workers	6,387	5,790	5,472	4,810	420.1	415.5	348.1
Workers in transport & communication	6,994	6,790	6,725	6,351	86.8	82.7	93.7
Tradesmen, production-process workers & labourers n.e.c. Millers, bakers, butchers, brewers &	67,899	69,813	68,003	62,268	138.8	137.0	127.4
related food & drink workers  Metal workers, metal & electrical	5,174	5,213	4,193	3,878	210.2	192.3	154.7
production-process workers n.e.c.  Bricklayers, plasterers & construction	4,969	5,317	5,480	4,588	191.6	240.0	241.8
workers n.e.c.	2,649	2,711	2,580	2,533	106.8	82.7	83.4
Labourers n.e.c.	12,457	13,977	14,750	14,408	236.9	276.1	231.0
Machine toolmakers, metal machinists, etc. (b) Other	17,056 25,594	16,180 26,415	15,446 25,554	13,760 23,101	n.a. n.a.	n.a. n.a.	n.a. n.a.
Service, sport & recreation workers	10,753	11,494	12,050	11,604	61.6	66.9	65.2
Total (c)	111,606	115,688	114,443	104,933	64.7	64.8	61.9

<sup>(</sup>a) Number of injuries per 1,000 workers. Incidence by occupation is not available for 1986-87. See Explanatory Note 16. (b) Included in 'other' in previous issues of this publication. (c) Includes occupations not stated.

	Injuries by accident								
		Perman	ent disability						
Industry	Fatal	Total	Partial	Temporary disability	Total cases	Incidence (a)			
Agriculture, forestry, fishing & hunting	19	-	86	2,495	2,600	70.9			
Mining	8	-	50	6,402	6,460	225.2			
Coal	7	-	10	5,582	5,599	271.5			
Other	1	-	40	820	861	106.8			
Manufacturing	31	-	479	26,673	27,183	70.8			
Food, beverages & tobacco	7		77	5,061	5,145	96.4			
Textiles, clothing & footwear	1	-	17	1,162	1,180	33.6			
Wood, wood products & furniture	3	-	41	1,782	1,826	78.0			
Paper, paper products, printing & publishing	2	-	38	1,585	1,625	37.7			
Chemicals, petroleum & coal products	1	-	17	1,266	1,284	51.2			
Non-metallic mineral products	1	-	22	1,274	1,297	74.5			
Basic metal products	2	-	54	2,998	3,054	78.2			
Fabricated metal products	5	-	60	3,632	3,697	97.8			
Transport equipment	2	-	79	2,315	2,396	73.2			
Other machinery & equipment	6	-	58	4,457	4,521	79.7			
Miscellaneous manufacturing	1	-	16	1,141	1,158	58.4			
Electricity, gas & water	8	-	21	3,198	3,227	66.2			
Construction	8	-	162	12,548	12,718	113.0			
Wholesale trade	12	-	80	4,248	4,340	31.3			
Retail trade	12	1	82	7,454	7,549	29.6			
Transport, storage & communication	24	-	148	6,131	6,303	(b)72.1			
Road transport	18	-	56	2,755	2,829	. 71.5			
Other	6	-	92	3,376	3,474	(b)72.8			
Finance, property & business services	13	-	49	3,480	3,542	16.1			
Public administration & defence	1	-	6	1,719	1,726	25.2			
Community services	14	1	84	11,840	11,939	33.0			
Health	5	-	35	6,833	6,873	47.5			
Education, museum & library services	5	1	28	2,224	2,258	15.1			
Other	4	-	21	2,783	2,808	41.9			
Recreation, personal & other services	4	2	98	3,732	3,836	31.0			
Total	154	4	1,345	89,920	91,423	(b)48.6			

<sup>(</sup>a) Number of injuries per 1,000 workers. (b) Excludes the industry categories 'Rail transport', 'Services to air transport' and 'Communication', which were included in previous years. This results in a break in the series. See Explanatory Note 21.

7

# BY INDUSTRY, TYPE OF OCCURRENCE AND EXTENT OF DISABILITY, N.S.W., 1986-87

		Occupational di	seases			Empl	oyment injuries
	Permanent	disability					
Fatal	Total	Partial	Temporary disability	Total cases	Incidence (a)	All cases	Incidence (a)
2		53	272	327	8.9	2,927	79.9
3	-	699	99	801	27.9	7,261	253.1
-	-	463	43	506	24.5	6,105	296.0
3	-	236	56	295	36.6	1,156	143.4
15	-	3,072	3,177	6,264	15.5	33,447	86.3
4	-	206	822	1,032	19.3	6,177	115.8
2	_	96	381	479	13.6	1,659	47.2
1	_	93	122	216	9.2	2,042	87.2
1	_	116	205	322	7.5	1,947	45.2
1	_	104	190	295	11.8	1,579	63.0
1	-	147	109	257	14.8	1,554	89.2
2	_	987	173	1,162	29.7	4,216	107.9
-	-	321	265	586	15.5	4,283	113.3
_		625	174	799	15.3	3,195	88.5
3	-	320	581	904	15.9	5,425	95.6
-	-	57	155	212	10.7	1,370	69.1
2	_	427	114	543	11.1	3,770	77.4
9	-	712	481	1,202	10.2	13,920	123.1
5	-	119	280	404	2.9	4,744	34.3
1	-	79	572	652	2.5	8,201	32.1
4	_	634	226	864	(b)6.5	7,167	(b)78.7
3	_	70	96	169	4.3	2,998	75.8
1	-	564	130	695	(b)9.1	4,169	(b)81.9
- 6	_	56	517	579	2.6	4,121	18.7
-	-	37	199	236	3.4	1,962	28.7
5	-	122	1,152	1,279	3.5	13,218	36.6
4	_	35	539	578	4.0	7,451	51.5
1	-	44	381	426	2.8	2,684	17.9
-	-	43	232	275	4.1	3,083	46.0
1	_	38	320	359	2.9	4,195	33.9
53		6,048	7,409	13,510	(b)6.9	104,933	(b)55.4

		1	njuries by accide	ent	
•		Permane	ent disability	T-	<i>T</i> 1
Occupation	Fatal	Total	Partial	Temporary disability	Total cases
Professional, technical & related workers	10	2	45	4,494	4,551
Administrative, executive & managerial					
workers; and clerical workers	19	-	67	5,596	5,682
Sales workers	6	1	40	3,437	3,484
Farmers, fishermen, timbergetters &					
related workers	18	-	99	3,091	3,208
Miners, quarrymen & related workers	6	-	41	4,357	4,404
Workers in transport & communication	25		129	5,500	5,654
Tradesmen, production-process workers &					
labourers n.e.c.	61	-	795	52,937	53,793
Millers, bakers, butchers, brewers &					
related food & drink workers	4	-	58	3,112	3,174
Metal workers, metal & electrical					
production-process workers n.e.c.	2	-	64	3,547	3,613
Bricklayers, plasterers & construction					
workers n.e.c.	3	-	. 29	2,231	2,263
Labourers n.e.c.	11	-	182	12,571	12,764
Machine toolmakers, metal machinists, etc. (b)	15	-	175	11,766	11,956
Other	26	-	287	19,710	20,023
Service, sport & recreation workers	7	1	123	10,353	10,484
Total (c)	154	4	1,345	89,920	91,423

<sup>(</sup>a) Incidence by occupation is not available. See Explanatory Note 16. (b) Included in 'other' in previous issues of this publication. (c) Includes occupations not stated.

# BY TYPE OF OCCURRENCE AND EXTENT OF DISABILITY, N.S.W., 1986-87

		Occupation	nal diseases			En	nployment in	iuries	
	Permanei	nt disability	т	T-1-1		Permane	nt disability	T	All
Fatal	Total	Partial	Temporary disability	Total cases	Fatal	Total	Partial	Temporary disability	cases
4	-	112	477	593	14	2	157	4,971	5,144
6	-	214	1,113	1,333	25		281	6,709	7,015
-	-	23	247	270	6	1	63	3,684	3,754
1	-	62	301	364	19	-	161	3,392	3,572
2	_	334	70	406	8	-	375	4,427	4,810
5	-	486	206	697	30	-	615	5,706	6,351
32	-	4,418	4,025	8,475	93		5,213	56,962	62,268
2	-	112	590	704	6		170	3,702	3,878
-	-	395	580	975	2	•	459	4,127	4,588
-	_	180	90	270	3		209	2,321	2,533
12	_	1,020	612	1,644	23	-	1,202	13,183	14,408
2	-	1,253	549	1,804	17	_	1,428	12,315	13,760
16	-	1,458	1,604	3,078	42	-	1,745	21,314	23,101
3	-	162	955	1,120	10	1	285	11,308	11,604
53	_	6,048	7,409	13,510	207	4	7,393	97,329	104,933

TABLE 1.7 INDUSTRY SUMMARY TABLE : WORKPLACE INJURIES AND OCCUPATIONAL DISEASES BY NUMBER, INCIDENCE (a) AND RELATIVE STANDARD ERROR, N.S.W., 1986-87

	Work	cplace injuries	Оссира	tional diseases	ner
Industry	Number	Incidence (a)	Number	Incidence (a)	— RSE (%)
Agriculture, forestry, fishing & hunting	2,492	67.9	327	8.9	7.1
Agriculture	1,967	66.7	229	7.8	7.9
Fruit & vegetables	188	*65.3	18	*6.3	28.2
Cereal grains, sheep, cattle & pigs	1,437	79.1	167	9.2	10.4
Other	342	40.4	44	5.2	24.9
Services to agriculture	325	*105.9	68	*22.1	27.3
Forestry & logging	158	*46.5	28	*9.1	30.8
Fishing & hunting	42	*41.7	2	*2.0	48.2
Mining	6,317	220.2	801	27.9	8.0
Metallic minerals	578	127.7	245	54.1	22.3
Coal	5,490	266.2	506	24.5	9.7
Construction materials	178	*137.0	33	*25.4	42.5
Other	71	*31.7	17	*7.6	32.2
Manufacturing	23,934	62.9	6,264	15.5	1.7
Meat products	1,862	142.8	541	41.5	12.5
Milk products	389	98.0	61	15.4	23.9
Flour mill & cereal food products	216	47.3	20	4.4	22.2
Bread, cakes & biscuits	592	50.9	110	9.5	13.4
Other food products	1,013	76.4	217	16.4	12.4
Beverages & malt	440	103.2	49	11.5	23.0
Tobacco products	192	*73.2	34	*13.0	29.7
Textiles	417	41.8	137	13.7	14.5
Clothing & knitting mills	475	21.7	289	13.2	9.4
Footwear	82	*25.1	53	*16.2	26.4
Wood & wood products	1,063	100.9	117	11.1	14.1
Furniture & mattresses	619	48.0	99	7.7	12.6
Paper & paper products	366	46.3	97	12.2	16.5
Printing & allied industries	985	28.0	225	6.4	7.2
Basic chemicals	443	*115.2	135	*35.1	27.1
Other chemical products	613	30.8	148	7.4	9.9
Petroleum refining, petroleum & coal products n.e.c.	48	*35.6	12	*8.9	41.7
Clay products & refractories	477	119.4	96	24.0	23,8
Cement & concrete products	311	41.9	56	7.5	25,8 17.1
Other non-metallic mineral products	404	*67.4	105	*17.5	31.1
Basic iron & steel	1,899	61.4			
Basic non-ferrous metals	549	143.4	1,004	32.4	7.7
Non-ferrous metal basic products	267	61.9	101 57	26.4	24.3
Structural metal products				13.2	22.8
Sheet metal products	1,097	119.2	124	13.5	15.6
	822	86.8	161	17.0	15.0
Other fabricated metal products	1,456	76.1	301	15.7	10.1
Motor vehicles & parts	620	57.9	198	17.7	14.6
Other transport equipment	1,316	69.9	601	13.6	14.4
Photographic, professional & scientific equipment	129	32.5	53	13.3	23.9
Appliances & electrical equipment	1,979	66.9	584	19.5	8.0
Industrial machinery & equipment	1,789	78.3	267	11.7	9.2
Plastic & related products	594	55.1	106	9.8	13.9
Other manufacturing	410	45.3	106	11.7	15.3
Electricity, gas & water	2,801	57.5	543	11.1	6.0
Electricity	1,892	69.5	288	10.6	8.4
Gas	143	*50.2	18	*6.3	28.4
Water, sewerage & drainage	766	41.1	237	12.7	10.3

TABLE 1.7 INDUSTRY SUMMARY TABLE : WORKPLACE INJURIES AND OCCUPATIONAL DISEASES BY NUMBER, INCIDENCE (a) AND RELATIVE STANDARD ERROR, N.S.W., 1986-87 (continued)

	Work	eplace injuries	Оссира	tional diseases	DCE
Industry	Number	Incidence (a)	Number	Incidence (a)	RSE (%)
Construction	11,744	104.8	1,202	10.2	3.7
Building construction	2,316	73.6	195	6.2	7.9
Non-building construction	6,943	269.2	843	30.5	8.9
Concreting, bricklaying & tiling trades	324	42.7	33	4.4	16.9
Other special trades	2,161	48.7	131	3.0	6.3
Wholesale & retail trade	10,146	25.8	1,056	2.7	1.7
Builders hardware dealers	649	33.5	46	2.4	10.1
Machinery & equipment wholesalers	784	16.5	83	1.7	6.0
Minerals, metals & chemical wholesalers	485	40.3	67	5.6	13.1
Food, drink & tobacco wholesalers	914	53.1	95	5.5	10.7
Other wholesalers	911	21.5	113	2.7	6.4
Department & general stores	1,346	29.3	174	3.8	6.1
Motor vehicle dealers; petrol & tyre retailers	1,980	31.8	157	2.4	5.1
Food stores	2,166	29.6	221	3.0	4.7
Other retailers	911	12.4	100	1.4	4.6
Transport, storage & communication	5,175	61.8	864	(b)6.5	6.9
Road transport	2,219	55.1	169	3.8	7.1
Water transport	1,185	114.8	173	16.9	15.0
Air transport	645	50.6	92	(b)7.2	13.3
Other transport, storage & communication	1,126	53.0	430	*(b)6.3	45.1
Finance, property & business services	2,550	11.6	579	2.6	2.5
Finance & investment	319	4.6	129	1.9	5.3
Insurance & services to insurance	131	4.8	64	2.3	8.5
Property & business services	2,100	17.0	386	3.1	3.4
Public administration & defence	1,303	19.0	236	3.4	5.6
Community services	9,923	27.5	1,279	. 3.5	1.8
Hospitals & nursing homes	5,747	55.1	534	5.1	3.8
Other health & veterinary services	128	3.2	44	1.1	6.6
School education	1,195	11.1	241	2.2	3.6
Other education, museum & library services	538	12.6	185	4.3	6.4
Welfare & religious institutions	711	18.5	60	1.6	6.8
Other community services	1,604	56.4	215	7.6	9.9
Recreation, personal & other services	3,289	26.7	359	2.9	3.5
Entertainment	188	14.7	27	2.1	14.3
Sport & recreation	473	38.9	25	2.1	13.0
Restaurants, hotels & accommodation	1,368	29.4	112	2.4	6.1
Clubs	936	32.4	98	3.4	8.0
Laundries & dry cleaners	157	42.7	26	7.1	24.9
Hairdressers, beauty salons	44	3.9	58	5.1	13.5
Other	123	15.7	13	1.7	16.6
Total	79,674	42.6	13,510	(b)6.9	0.7

<sup>(</sup>a) Number of injuries per 1,000 workers. (b) Excludes the industry categories 'Rail transport', 'Services to air transport' and 'Communication', which were included in previous years. This results in a break in the series. See Explanatory Note 21.

# TABLE 1.8 OCCUPATION (a) SUMMARY TABLE: WORKPLACE INJURIES AND OCCUPATIONAL DISEASES, N.S.W.

	Workpla	ce injuries	Occupational diseases		
Occupation	1985-86	1986-87	1985-86	1986-87	
Professional, technical & related workers	3,474	3,491	702	593	
Nurses & professional medical workers	1,884	1,826	208	156	
Teachers	775	863	194	232	
Other	815	802	300	205	
Admin., executive & managerial workers	1,161	1,017	217	141	
Clerical workers	2,594	2,364	2,242	1,192	
Book-keepers & cashiers	270	264	145	78	
Stenographers, typists & receptionists	228	193	443	210	
Office machine operators	145	116	398	216	
Other - government	505	555	227	213	
Other - non-government	1,446	1,236	1,029	475	
Sales workers	2,834	2,726	323	270	
Salesmen & shop assistants	2,274	2,232	279	224	
Commercial travellers & manufacturing agents	246	227	13	16	
Other	314	267	31	30	
Farmers, fishermen, hunters & timbergetters	3,502	3,039	323	364	
Farmers & farm managers	235	180	17	10	
Station hands, drovers, etc.	487	451	24	23	
Shearers	480	398	126	155	
Gardeners & nursery workers	447	425	39	31	
Groundkeepers, etc.	252	217	10	14	
Other farm workers	1,313	1,148	85	94	
Other	288	220	22	37	
Miners, quarrymen & related workers	4,797	4,330	583	406	
Machinemen, drilling machine operators	2,668	2,224	211	134	
Loaders, wheelers, clippers & truckers	656	1,163	95	106	
Timbermen & shiftmen	382	163	55	24	
Deputies & supervisors	474	320	82	25	
Labourers	178	111	35	20	
Other	439	349	105	97	
Workers in transport & communication	4,968	4,605	695	697	
Bus drivers	117	115	22	22	
Car, taxi & hire car drivers	60	72	6	4	
Motor truck & van drivers	4,140	3,712	338	304	
Other	651	706	329	367	
Fradesmen, production-process workers & labourers n.e.c.	52,939	48,845	9,595	8,475	
Spinners, weavers, knitters, dyers, etc.	267	254	86	97	
Tailors, cutters, furriers, etc.	638	538	381	304	
Furnacemen, rollers, drawers, moulders, etc.	557	503	165	158	
Precision instrument makers, etc.	101	118	16	21	
Machine toolmakers, metal machinists, etc.	12,006	10,903	2,114	1,804	
Metal fitters, fitters & turners	3,393	3,051	512	472	
Machine toolmakers & metal diemakers	159	99	34	27	
Machine toolsetters & operators	1,191	1,032	365	274	
Motor vehicle mechanics	1,508	1,370	93	78	
Sheetmetal workers	556	523	93 71	76 76	
Panel beaters	252	207	35	76 21	
Plumbers & pipe & gas fitters	1,005	978	83	104	
Welders & flame cutters	1,003	850	176	180	
Boilermakers & structural steel workers					
	1,300	1,154	334	274	
Other	1,641	1,639	411	298	
Electricians & related workers	2,515	2,352	208	231	
Metal workers, metal & electrical production-process workers n.e.c.	3,738	3,122	1,240	975	

TABLE 1.8 OCCUPATION (a) SUMMARY TABLE: WORKPLACE INJURIES AND OCCUPATIONAL DISEASES, N.S.W. (continued)

	Workplac	ce injuries	Occupation	Occupational diseases		
Occupation	1985-86	1986-87	1985-86	1986-87		
Tradesmen, production-process workers &						
labourers n.e.c. (continued)-						
Carpenters, wood working machinists, etc	3,110	2,725	316	340		
Carpenters, joiners & cabinetmakers	2,087	1,944	203	213		
Sawmill & timberyard workers	318	177	30	33		
Other	705	604	83	94		
Painters & decorators	888	751	93	97		
Bricklayers, plasterers etc.	2,140	2,113	274	270		
Bricklayers	210	250	45	32		
Plasterers	221	175	18	28		
Concrete & terrazzo workers	241	231	24	20		
Foremen - building & construction	400	354	52	50		
Pipelayers	246	234	46	78		
Other	822	869	89	62		
Compositors, printing machinists, etc.	657	592	147	121		
Millers, bakers, butchers, brewers, etc.	3,215	2,969	761	704		
Butchers & meat cutters	1,518	1,399	228	287		
Other	1,697	1,570	533	417		
Chemical, sugar & paper production-process workers	738	661	264	182		
Tobacco preparers & tobacco product makers	68	89	28	25		
Paper products, rubber, plastic &						
production-process workers n.e.c.	1,071	941	287	245		
Packers, wrappers & labellers	819	746	229	154		
Stationary engine, excavator, etc. operators	2,758	2,628	657	499		
Crane & hoist operators	478	479	207	108		
Operators - earthmoving & other construction operators	1,100	952	215	183		
Material handling equipment operators	584	634	117	110		
Other	596	563	118	98		
Storemen & freight handlers	4,831	4,552	485	430		
Waterside workers n.e.c.	879	681	143	106		
Storemen	3,422	3,421	316	304		
Freight handlers n.e.c.	530	450	26	20		
Labourers n.e.c.	12,078	11,683	1,618	1,644		
Other tradesmen, production-process workers &						
labourers n.e.c.	744	605	226	174		
Service sport & recreation workers	9,388	9,124	1,227	1,120		
Fire brigade & fire prevention workers	309	391	26	31		
Other protection service workers	466	533	49	105		
Cooks & chefs	837	720	68	66		
Maids, hotel & hospital	857	855	112	92		
Catering & kitchen workers	1,070	1,056	111	104		
Other domestic service workers	360	380	59	61		
Waiters & bartenders	710	701	98	68		
Caretakers & cleaners	2,141	1,953	398	337		
Barbers, hairdressers & beauticians	53	45	65	56		
Launderers, dry cleaners & pressers	242	236	66	56		
Athletes, sportsmen & related workers	181	149	1	2		
Nursing aides	557	347	29	19		
Ambulance officers	155	161	11	7		
Attendants, hospital & other medical	996	1,205	92	79		
Other service, sport & recreation	454	392	42	37		
Total (b)	85,952	79,674	16,017	13,510		

<sup>(</sup>a) Incidence by occupation is not available. See Explanatory Note 16. (b) Includes occupations not stated.

## **SECTION 2**

# **WORKPLACE INJURIES**

#### Incidence by industry and sex (see Table 2.1)

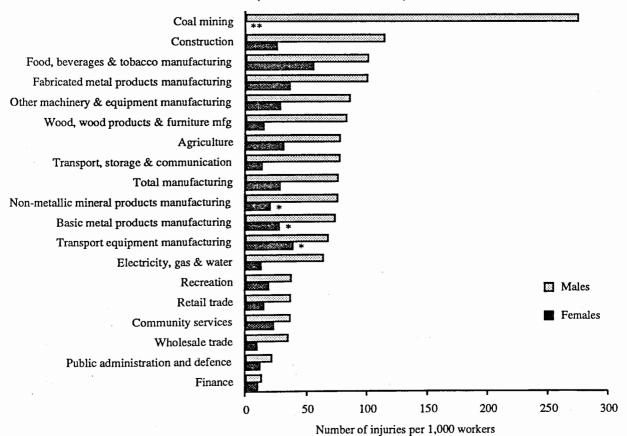
Because of the predominance of males in high risk industries (such as Coal mining and Construction, etc.), the overall incidence of male workplace injuries was over three times the rate for females during 1986-87.

The highest risk industries for males in 1986-87 were Coal mining (with 274 injuries per thousand workers), Other mining and Construction (both with 114 injuries per thousand workers).

Industries with the highest incidence of female workplace injuries in 1986-87 were Food, beverages and tobacco manufacture (55 per thousand workers), Transport equipment manufacture (39 per thousand workers) and Health (37 per thousand workers).

There has been a marked drop in the incidence of workplace injuries for male workers in the Transport equipment manufacturing industry (down from 142 injuries per thousand workers in 1982-83 to 67 per thousand in 1986-87), and in the Construction industry (down from 151 per thousand workers in 1982-83 to 114 per thousand workers in 1986-87).

# INCIDENCE OF WORKPLACE INJURIES BY INDUSTRY AND SEX (Source of data: Table 2.1)



\* Subject to sampling variability too high for most practical purposes

#### Injuries by occupation and sex (see Table 2.2)

Incidence is not available by occupation for 1986-87.

For males, most injuries occurred in the occupation group Tradesmen, production-process workers and labourers in 1986-87. This group accounted for 45,000 injuries (70 per cent of all injuries to males).

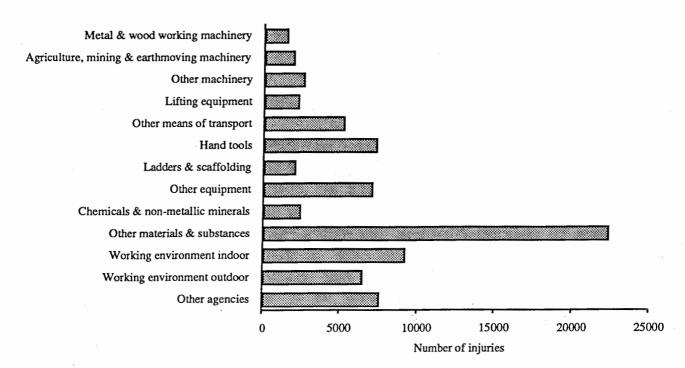
Occupations with the highest number of injuries to females were: Service, sport and recreation workers with 5,095 cases (35 per cent of female injuries) and Tradesmen, production-process workers and labourers n.e.c. with 3,500 injuries (24 per cent).

The 'agency' of accident refers to the object, substance or circumstance closely associated with the injury. In this context it is useful to distinguish between agency of injury and agency of accident. For example, following a fire-damp explosion, a miner may be crushed by a beam torn loose by the force of the explosion. The agency of injury is the beam but the agency of the accident is the material responsible for the fire-damp explosion. The essential difference between 'type' and 'agency' of accident is that 'type' refers to an action of some kind (e.g. a fall), whereas 'agency' identifies an object.

As the diagram below shows, the largest number of injuries resulting from workplace accidents during 1986-87 was attributed to the broad agency category of Other materials and substances (22,380). This category includes objects such as oils and fats, protruding stakes and nails, trees felled for subsequent processing, ferrous and non-ferrous metals, etc. Twenty-eight per cent of all workplace injuries for the period involved agencies in this category and they occurred mainly in the Manufacturing and Construction industries (8,310 and 3,736 cases respectively).

The next most common agency falls within the general heading of Working environment (about 17,000). This includes: outdoor working environment (covering such things as extreme temperatures, rain, hail, trees, etc.); indoor working environment (stairs, walls, floors, lifts, etc.); and underground working environment (mine shafts, tunnels, underground fires, etc.). Working environment accounted for 22 per cent of accidents for the same period. Again, most accidents in this category occurred in Manufacturing (3,855) and Construction (2,614), as well as in Community services (2,716).

# WORKPLACE INJURIES BY AGENCY OF ACCIDENT (Source of data: Table 2.4)

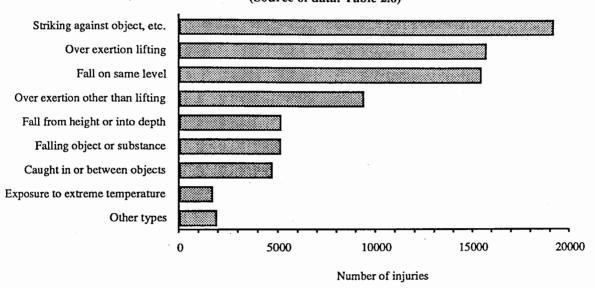


## Nature of injury and type of accident (see Table 2.6)

By far the most common injuries sustained in workplace accidents were Sprains and strains, with some 40,000 cases in 1986-87. This was a little over 50 per cent of all injuries reported. Most of these Sprains and strains resulted from Over exertion and physical stress (58 per cent) and Falls on the same level (25 per cent).

The next most common injuries suffered were Lacerations and open wounds (over 12,000). Sixty-eight per cent of these resulted from Striking against an object.

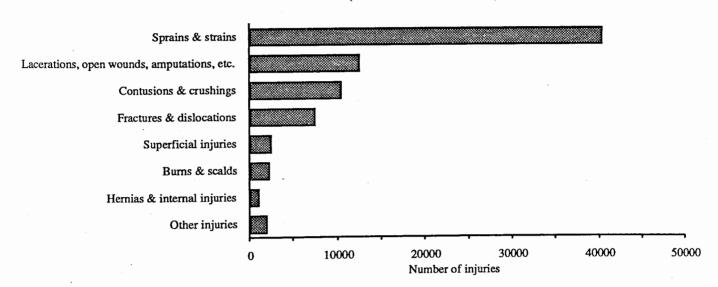
# WORKPLACE INJURIES BY TYPE OF ACCIDENT (Source of data: Table 2.6)



#### Type of accident (see Tables 2.6 and 2.7)

The types of workplace accidents causing the greatest number of employment injuries in 1986-87 were Striking against an object (over 19,000), Over exertion and physical stress (15,700) and Falls on the same level (15,500).

# WORKPLACE INJURIES BY NATURE OF INJURY (Source of data: Table 2.6)



## Nature of injury and bodily location (See Table 2.9)

The largest number of workplace injuries in 1986-87 were Sprains and strains to the Trunk, chest and abdomen which occurred in just under 20,000 cases. These accounted for almost 25 per cent of injuries. Sprains and strains to the Knee and lower leg were the next most common, accounting for over 8,000 or 10 per cent of all injuries.

## Injuries by age group (see Table 2.10)

The largest number of workplace injuries during 1986-87 involved persons in the 20-24 age group. This group accounted for 16 per cent of male and 14 per cent of female workplace injuries in the year. The occurrence of injuries to males decreased progressively in higher age groups. Among females, the level of workplace injuries decreased slightly for the 25-29 and 30-34 age groups then rose to another peak for the 35-39 year olds. Above this age group, injuries steadily declined.

18

# TABLE 2.1 WORKPLACE INJURIES: NUMBER AND INCIDENCE (a)

			M	ales		
	<del></del>	Permane	nt disability			
Industry	Fatal	Total	Partial	Temporary disability	Total cases	Incidence (a)
Agriculture, forestry, fishing & hunting	14	-	79	2,183	2,276	76.9
Mining	7	. <b>-</b>	49	6,253	6,309	231.8
Coal	6	-	10	5,473	5,489	274.0
Other	1	-	39	780	820	114.1
Manufacturing	13	-	412	20,700	21,125	75.4
Food, beverages & tobacco	3	· _	60	3,848	3,911	100.4
Textiles, clothing & footwear	-	-	12	495	507	40.4
Wood, wood products & furniture	. 3	-	38	1,586	1,627	82.3
Paper, paper products, printing & publishing	,		33	1 101	1 125	41.8
Chemicals, petroleum & coal products	1	•	33 14	1,101 882	1,135 897	51.0
Non-metallic mineral products		•	21	1,128	1,149	75.1
Basic metal products	-		49	2,584	2,633	73.0
Fabricated metal products	3	_	50	3,100	3,153	99.8
Transport equipment	1	_	72	1,773	1,846	67.4
Other machinery & equipment	1	_	49	3,405	3,455	85.0
Miscellaneous manufacturing	-	-	14	798	812	59.2
Electricity, gas & water	3	_	20	2,704	2,727	63.5
Construction	1	-	151	11,316	11,468	113.7
Wholesale trade	3	-	60	3,273	3,336	34.5
Retail trade	1	•	52	4,262	4,315	36.6
Transport, storage & communication	9	_	116	4,773	4,898	(b)76.5
Road transport	4		42	2,126	2,172	64.2
Other	5	-	74	2,647	2,726	(b)94.0
Finance, property & business services	7	-	17	1,340	1,364	13.2
Public administration & defence	-	· -	5	1,075	1,080	21.5
Community services	3	_	33	4,328	4,364	36.3
Health	1	-	8	1,806	1,815	54.0
Education, museum & library services	1	-	. 14	871	886	15.4
Other	1	-	11	1,651	1,663	56.6
Recreation, personal & other services	2	1	55	1,843	1,901	37.1
Total	63	1	1,049	64,050	65,163	(b)59.7

<sup>(</sup>a) Number of injuries per 1,000 workers. (b) Excludes the industry categories 'Rail transport', 'Services to air transport' and 'Communication', which were included in previous years. This results in a break in the series. See Explanatory Note 21.

# BY INDUSTRY, EXTENT OF DISABILITY AND SEX, N.S.W., 1986-87

		Females	•			Persons		
	Permanent	disability						
Fatal	Total	Partial	Temporary disability	Total cases	Incidence (a)	All cases	Incidence (a)	
-		5	211	216	30.8	2,492	67.9	
_	_	-	8	8	*5.5	6,317	220.2	
-	-	-	1	1	**	5,490	266.2	
-	-	-	7	7	**	827	102.6	
1	-	30	2,778	2,809	28.2	23,934	62.9	
_	-	8	785	793	55.0	4,704	88.2	
_	_	4	463	467	20.6	974	27.7	
-	-	1	. 54	55	15.0	1,682	71.8	
_	-	2	214	216	13.5	1,351	31.4	
-	_	3	204	207	27.6	1,104	44.0	
-	-	-	43	43	*20.3	1,192	68.4	
_	-	-	82	82	*27.6	2,715	69.5	
-	-	3	219	222	35.7	3,375	89.3	
-	-	4	86	90	*38.7	1,936	64.9	
1	-	4	437	442	28.2	3,897	69.1	
-	. <del>-</del>	1	191	192	31.4	1,004	50.6	
_	_	_	74	74	12.9	2,801	57.5	
_	_	1	275	276	25.4	11,744	104.8	
_	_	10	397	407	9.7	3,743	27.0	
1	-	14	2,073	2,088	15.2	6,403	25.1	
		1.4	263	277	(b)13.6	5,175	(b)61.8	
-	-	14 2	45	47	8.2	2,219	56.1	
· -	-	12	218	230	(b)16.2	2,956	(b)68.1	
_		8	1,178	1,186	10.2	2,550	11.0	
-	-	-	223	223	12.3	1,303	19.0	
		34	5,525	5,559	23.1	9,923	27.5	
, -	-	34 17	.4,043	4,060	36.6	5,875	40.6	
-	-	17	835	847	9.2	1,733	11.6	
-	-	5	647	652	17.3	2,315	34.0	
-		30	1,358	1,388	19.2	3,289	26.7	
2	-	146	14,363	14,511	(b)18.8	79,674	(b)42.6	

			Males		
		Permane	ent disability	<i>T</i>	Takal
Occupation	Fatal	Total	Partial	Temporary disability	Total cases
Professional, technical & related workers	2	-	20	1,133	1,155
Administrative, executive & managerial					
workers; and clerical workers	5	-	29	1,686	1,720
Sales workers	1	-	17	1,202	1,220
Farmers, fishermen, timbergetters &					
related workers	13	-	88	2,656	2,757
Miners, quarrymen & related workers	5	-	40	4,285	4,330
Workers in transport & communication	6	-	96	4,402	4,504
Tradesmen, production-process workers &					
labourers n.e.c.	28	-	694	44,604	45,326
Millers, bakers, butchers, brewers &					
related food & drink workers	1	-	43	2,458	2,502
Metal workers, metal & electrical					
production-process workers n.e.c.	1	-	53	2,493	2,547
Bricklayers, plasterers & construction			24	0.070	2.000
workers n.e.c.	-	-	26	2,072	2,098
Labourers n.e.c.	7	-	161	11,006	11,174
Machine toolmakers, metal machinists, etc. (b)	3	-	162	10,609	10,774
Other	16	-	249	15,966	16,231
Service, sport & recreation workers	1	1	60	3,967	4,029
Total (c)	63	1	1,049	64,050	65,163

<sup>(</sup>a) Incidence by occupation is not available. See Explanatory Note 16. (b) Included in 'other' in previous issues of this publication.

<sup>(</sup>c) Includes occupations not stated.

21
OCCUPATION (a) BY EXTENT OF DISABILITY AND SEX, N.S.W., 1986-87

		Fen	nales				Persons		
	Permanei	nt disability	T	T-4-1		Permane	nt disability	T	All
Fatal	Total	Partial	Temporary disability	Total cases	Fatal	Total	Partial	Temporary disability	cases
-	<b>-</b> .	16	2,320	2,336	2	-	36	3,453	3,491
-	-	13	1,648	1,661	5	-	42	3,334	3,381
-	-	11	1,495	1,506	1	-	28	2,697	2,726
-		7	275	282	13	-	95	2,931	3,039
-	_	-	-	•	5	-	40	4,285	4,330
-		6	95	101	6	-	102	4,497	4,605
1	-	45	3,473	3,519	29	-	739	48,077	48,845
-	-	9	458	467	1	-	52	2,916	2,969
1	-	6	568	575	2	-	59	3,061	3,122
	_	_	15	15	_	-	26	2,087	2,113
_	_	14	495	509	7	-	175	11,501	11,683
-	_	2	127	129	3	-	164	10,736	10,903
-	-	14	1,810	1,824	16	-	263	17,776	18,055
1	-	47	5,047	5,095	2	1	107	9,014	9,124
2		146	14,363	14,511	65	1	1,195	78,413	79,674

			Oce	cupation						
Industry	Professional, technical & related workers	Admin., exec. & managerial workers; clerical workers	Sales workers	Farmers, fishermen, etc.	Miners, quarrymen & related workers	Workers in transport & commun- ication				
Agriculture, forestry, fishing										
& hunting	25	71	4	2,136	-	60				
Mining	36	30	-	2	4,276	125				
Coal	30	21	-	-	3,793	74				
Other	6	9	-	2	483	51				
Manufacturing	115	486	199	88	13	592				
Food, beverages & tobacco	10	81	79	27	1	178				
Textiles, clothing & footwear	5	15	14	2	-	16				
Wood, wood products &		35		_		10				
furniture	3	31	8	42	1	59				
Paper, paper products,										
printing & publishing	15	59	21	4	-	27				
Chemicals, petroleum & coal										
products	18	33	25	5	-	49				
Non-metallic mineral products	7	25	2	1	2	61				
Basic metal products	10	40	5	2	8	84				
Fabricated metal products	11	47	19	1	-	50				
Transport equipment	10	35	5	1	-	31				
Other machinery & equipment	24	94	12	2	1	28				
Miscellaneous manufacturing	2	26	9	1	-	9				
Electricity, gas & water	58	170	14	7	7	150				
Construction	34	120	10	110	23	757				
Wholesale trade	. 16	223	182	40	4	342				
Retail trade	15	469	2,153	18	-	160				
Transport, storage & communication	9	266	18	9	_	1,967				
Road transport	_	59	8	5	_	1,451				
Other	9	207	10	4	-	516				
Finance, property & business										
services	62	514	40	26		110				
Public administration & defence	109	252	48 3	26 246	3	110				
			3	246	3	37				
Community services	2,954	493	13	144	1	254				
Health	1,880	169	3	45	~	76				
Education, museum & library services		190	2	76	-	12				
Other	156	134	8	23	1	166				
Recreation, personal & other services	58	287	82	213	-	51				
rotal rotal	3,491	3,381	2,726	3,039	4,330	4,605				

<sup>(</sup>a) Included in 'other' in previous issues of this publication. (b) Includes occupations not stated.

			Оссир	ation			
	I	radesmen, productio	n-process wor	kers & labourers n.e.	c.	Campian	
Millers, bakers, etc.	Metal workers, etc.	Bricklayers, plasterers, etc.	Labourers n.e.c.	Machine tool- makers, metal machinists, etc.(a)	Other	Service, sport & recreation workers	Total (b)
24	3	4	-	51	92	20	2,492
_	18	27	-	1,108	674	7	6,317
-	8	13	-	983	553	3	5,490
-	10	14	-	125	121	4	827
2,143	2,556	273	3,928	5,400	7,726	368	23,934
2,116	38	3	1,017		705	145	4,704
1	10	3	83		755	19	974
-	41	47	331	48	1,054	14	1,682
-	34	-	202	123	843	20	1,351
11	30	4	103	109	677	39	1,104
11	17	110	376		469	3	1,192
•	407	22	691		754	26	2,715
7	631	51	470		522	25	3,375
1	279	5	176		462	19	1,936
4	1,021	23	355		788	47	3,897
3	48	5	124	69	697	11	1,004
1	164	227	572	325	1,000	98	2,801
3	161	1,268	4,785		2,970	31	11,744
212	109	134	495		1,546	33	3,743
553	28	13	349		1,176	238	6,403
13	36	22	355	391	1,808	273	5,175
2	2	15	164		348	22	2,219
11	34	7	191		1,460	251	2,956
	10	41	134	141	268	1,190	2,550
1	13 · 8	41 26	169		119	157	1,303
					480	4,553	9,923
7	22	56	744		219	3,264	5,875
4	1	23	101 153		125	203	1,733
3	3 18	18 15	49(		136	1,086	2,315
12	4	22	152		196	2,156	3,289
2,969	3,122	2,113	11,683	3 10,903	18,055	9,124	79,674

	Agency of accident								
Industry	Metal & wood- working machinery	Agric., mining & earthmoving machinery	Other machinery	Lifting equipment	Other means of transport	Hand tools			
Agriculture, forestry, fishing									
& hunting	22	326	23	40	310	192			
Mining	22	950	85 .	342	713	407			
Coal	16	859	72	308	638	304			
Other	6	91	13	34	75	103			
Manufacturing	1,128	59	1,517	820	747	2,622			
Food, beverages & tobacco	14	16	341	158	194	783			
Textiles, clothing & footwear	8	-	217	17	35	47			
Wood, wood products &									
furniture	196	2	40	40	38	221			
Paper, paper products,									
printing & publishing	16	-	306	42	30	75			
Chemicals, petroleum & coal .									
products	7	3	76	54	28	52			
Non-metallic mineral products	11	10	52	52	66	70			
Basic metal products	155	13	28	157	96	246			
Fabricated metal products	300	5	109	90	66	342			
Transport equipment	119	4	39	55	101	262			
Other machinery & equipment	268	5	161	129	74	428			
Miscellaneous manufacturing	34	1	148	26	19	96			
Electricity, gas & water	20	46	41	66	254	357			
Construction	112	373	168	193	806	1,439			
Wholesale trade	75	23	135	173	222	332			
Retail trade	41	9	303	172	493	819			
Transport, storage & communication	16	15	64	338	832	185			
Road transport	8	11	19	92	456	71			
Other	8	4	45	246	376	114			
Finance, property & business									
services	14	17	53	60	99	115			
Public administration & defence	9	54	15	10	107	136			
Community services	38	34	124	52	510	428			
Health	8	5	79	. 21	252	253			
Education, museum & library services	19	21	21	16	52	70			
Other	11	8	24	15	206	105			
Recreation, personal & other services	9	27	112	17	139	281			
Total	1,506	1,933	2,640	2,283	5,232	7,313 ·			

<sup>(</sup>a) Includes agencies not classified for lack of sufficient data.

			Non-		We	orking environn	rent		
Ladders & scaffolding	Other equip- ment	Chemicals	metallic minerals, etc.	Other materials & substances	Indoor	Outdoor	Under- ground	Other agencies (a)	Total
48	83	43	18	482	101	294	-	510	2,492
52	270	28	158	1,307	178	149	1,533	123	6,317
37	196	17	142	1,095	141	107	1,460	98	5,490
15	74	11	16	212	37	42	73	25	827
533	2,045	387	445	8,310	2,818	1,037	-	1,466	23,934
82	310	63	42	1,337	726	155	-	483	4,704
20	62	6	5	324	136	22	-	75	974
40	166	10	32	612	104	99	-	82	1,682
24	126	26	. 8	420	151	40	-	87	1,351
31	121	83	13	357	176	41	_	62	1,104
46	95	6	208	342	102	72	-	60	1,192
33	303	38	34	951	377	160	_	124	2,715
83	225	58	55	1,471	296	120	-	155	3,375
55	167	29	20	602	221	165	-	97	1,936
106	397	52	25	1,501	408	138	-	205	3,897
13	73	16	3	393	121	25	-	36	1,004
144	385	9	45	622	245	409	-	158	2,801
642	604	84	396	3,736	802	1,809	3	577	11,744
83	352	32	138	1,300	435	214	1	228	3,743
136	609	60	68	2,021	885	257	-	530	6,403
155	440	35	44	1,465	592	635	1	358	5,175
52	188	21	21	706	154	227	-	193	2,219
103	252	14	23	759	438	408	1	165	2,956
74	506	12	31	580	534	232	-	223	2,550
28	131	16	24	303	125	230	-	115	1,303
131	1,267	128	130	1,562	1,733	980	3	2,803	9,923
70	712	47	68	816	1,059	277	•	2,208	5,875
24	350	30	19		323	269	2	240	1,733
37	205	51	43	469	351	434	1	355	2,315
68	383	39	72	692	778	223	-	449	3,289
2,094	7,075	873	1,569	22,380	9,226	6,469	1,541	7,540	79,674

			Agency of	f accident		
Occupation n	Metal & wood- working achinery	Agric., mining & earthmoving machinery	Other machinery	Lifting equipment	Other means of transport	Hand tools
Professional, technical & related workers	15	8	25	14	104	60
Administrative, executive & managerial workers; and clerical workers	11	10	59	41	135	84
Sales workers	4	7	118	60	167	192
Farmers, fishermen, timbergetters & related workers	16	383	28	35	348	277
Miners, quarrymen & related workers	6	690	37	196	412	229
Workers in transport & communication	2	55	47	103	1,125	127
Tradesmen, production-process workers & labourers n.e.c. Millers, bakers, butchers, brewers &	1,435	771	2,105	1,781	2,518	5,735
related food & drink workers  Metal workers, metal & electrical	5	6	275	49	77	851
production-process workers n.e.c. Bricklayers, plasterers & construction	229	<b>.</b> 3	140	77	81	310
workers n.e.c.	20	30	24	24	95	230
Labourers n.e.c.	203	200	285	284	807	1,408
Machine toolmakers, metal machinists, etc. (1	600	213	447	396	650	1,615
Other	378	319	934	951	808	1,321
Service, sport & recreation workers	12	6	219	52	417	599
Total (c)	1,506	1,933	2,640	2,283	5,232	7,313

<sup>(</sup>a) Includes agencies not classified for lack of sufficient data. (b) Included in 'other' in previous issues of this publication. (c) Includes occupations not stated.

TABLE 2.6 WORKPLACE INJURIES: NATURE OF INJURY

Nature of injury	Type of accident					
	Fall from height or into depth	Fall on same level	Falling object or substance	Stepping on object	Striking against object, etc.	Caught in or between objects
Fractures & dislocations	1,161	1,782	1,093	5	1,810	1,004
Sprains & strains	2,484	9,970	746	71	2,372	379
Concussion & intracranial						
injuries	31	47	56	-	229	-
Hernias & other internal						
injuries	13	68	3	- '	40	3
Amputations & enucleations	1	1	10	-	88	116
Lacerations & open wounds	232	687	1,038	165	8,352	1,487
Superficial injuries	33	98	89	8	2,016	32
Contusions & crushings	830	2,173	1,865	21	3,737	1,584
Burns & scalds	7	67	-	-	1	-
Multiple injuries	246	234	119	-	210	51
Other (b)	95	330	100	1	321	50
Total	5,133	15,457	5,119	271	19,176	4,706

<sup>(</sup>a) Includes types of accident not classified for lack of sufficient data. (b) Includes natures of injury not classified for lack of sufficient data.

				Agency of	<sup>f</sup> accident				
	Other		Non- metallic	041	We	orking environn	nent		
Ladders & scaffolding	equip- ment	Chemicals	minerals, etc.	Other materials & substances	Indoor	Outdoor	Under- ground	Other agencies (a)	Total
34	436	36	43	303	582	355	7	1,469	3,491
65	553	24	33	723	855	371	6	411	3,381
87	318	15	31	878	478	129	-	242	2,726
58	114	48	35	577	117	442	1	560	3,039
32	163	14	110	965	85	83	1,235	73	4,330
82	339	28	75	1,289	327	635	4	367	4,605
1,614	3,774	588	1,101	15,951	4,661	3,845	285	2,681	48,845
32	136	32	18	707	399	65	-	317	2,969
57	275	50	44	1,210	364	133	-	149	3,122
188	123	12	217	588	139	295	3	125	2,113
323	784	138	347	3,871	911	1,484	1	637	11,683
311	765	137	131	3,500	943	534	176	485	10,903
703	1,691	219	344	6,075	1,905	1,334	105	968	18,055
118	1,365	116	140	1,653	2,105	600	1	1,721	9,124
2,094	7,075	873	1,569	22,380	9,226	6,469	1,541	7,540	79,674

# BY TYPE OF ACCIDENT, N.S.W., 1986-87

				Type of a			
	Other		Exposure	Contact	Contact	physical stress	Over exertion/
Tota	types of accident (a)	Explosion or implosion	to harmful substance, radiation	with electric current	extreme temp- erature	Other	Lifting, carrying
7,418	201	2	-	4		142	214
40,274	689	2	-	5	-	8,945	14,611
380	10	5	.1	•	-	-	1
1,060	15	-	-	-	-	202	716
221	5	-	-	-	-		-
12,215	220	33	-	1	-	-	-
2,511	226	9	-	· -	-	-	-
10,378	160	8	-	-	_	-	_
2,294	1	93	370	75	1,680	-	-
939	. 43	11	-	5		8	12
1,984	345	24	367	81	22	83	165
79,674	1,915	187	738	171	1,702	9,380	15,719

			Agency o	f accident		
Type of accident	Metal & wood- working machinery	Agric., mining & earthmoving machinery	Other machinery	Lifting equipment	Other means of transport	Hand tools
Fall from height or into depth	1	109	31	120	698	18
Fall on same level	16	166	60	318	1,035	51
Falling object or substance	52	148	102	143	168	256
Stepping on object	-	-	-	2	1	-
Striking against object, etc.	710	572	816	735	1,362	4,506
Caught in or between objects	451	194	860	403	506	265
Over exertion/physical stress-						
Lifting, carrying	54	323	301	137	264	335
Other	199	339	392	315	765	1,386
Exposure or contact with						
extreme temperature	11	15	58	10	48	295
Contact with electric current	1	3	8	4	-	20
Exposure to harmful substance or radiation		_	_	-	-	143
Explosion or implosion	7	2	6	2	7	19
Other types of accident (b)	4	62	6	94	378	19
Total	1,506	1,933	2,640	2,283	5,232	7,313

<sup>(</sup>a) Includes agencies not classified for lack of sufficient data. (b) Includes types of accident not classified for lack of sufficient data.

TABLE 2.8 WORKPLACE INJURIES: NATURE OF INJURY

			Agency o	f accident		
Nature of injury	Metal & wood- working machinery	Agric., mining & earthmoving machinery	Other machinery	Lifting equipment	Other means of transport	Hand tools
Fractures & dislocations	139	167	258	284	704	426
Sprains & strains	288	984	819	924	2,601	1,839
Concussion & intracranial						
injuries	3	8	9	10	27	16
Hernias & other internal						
injuries	9	9	17	25	58	46
Amputations & enucleations	42	11	57	25	10	25
Lacerations & open wounds	644	326	885	306	478	3,397
Superficial injuries	142	40	30	31	54	374
Contusions & crushings	199	300	439	583	995	635
Burns & scalds	11	19	67	12	55	348
Multiple injuries	13	24	22	51	131	20
Other (b)	16	45	37	32	119	187
Total	1,506	1,933	2,640	2,283	5,232	7,313

<sup>(</sup>a) Includes agencies not classified for lack of sufficient data. (b) Includes natures of injury not classified for lack of sufficient data.

				Agency of acc	cident				
	Other		Non- metallic	Other	Work	ing environ	nent	0.1	
Ladders & scaffolding	equip- ment	Chemicals	minerals, etc.	materials & substances	Indoor	Outdoor	Under- ground	Other agencies (a)	Total
1,190	364	-	15	260	1,340	754	13	220	5,133
393	404	-	30	518	6,579	4,845	913	129	15,457
72	646	-	200	2,573	46	103	516	94	5,119
-	3	-	-	68	96	101	-	-	271
182	1,626	86	735	5,291	742	404	92	1,317	19,176
40	513	-	48	1,102	192	68	5	59	4,706
121	2,012	-	382	9,428	29	76	_	2,257	15,719
93	1,162	-	87	2,182	124	69	-	2,267	9,380
·	147	195	14	863	12	11	_	23	1,702
-	123	<b>-</b> .	· .	6	· 1	2		3	171
-	2	554	29	2	_	5		3	738
-	43	33	22	32	_	-		14	187
3	30	5	7	. 55	65	31	2	1,154	1,915
2,094	7,075	873	1,569	22,380	9,226	6,469	1,541	7,540	79,674

# BY AGENCY OF ACCIDENT, N.S.W., 1986-87

	Other		Non-		Work	ing environ	nent	0.1	
Other Ladders & equip- caffolding ment	)- m	metallic minerals, etc.	Other materials & substances	Indoor	Outdoor	Under- ground	Other agencies (a)	Tota	
384	587	1	74	1,705	1,195	893	69	532	7,418
1,094	3,820	2	534	12,258	5,206	3,957	793	5,155	40,274
12	58	1	2	101	48	31	5	49	380
16	152	-	12	546	41	22	2	105	1,060
1	14	_	1	24	4	1	1	5	221
117	795		491	3,094	577	454	186	465	12,215
10	74	87	266	972	76	65	40	250	2,511
345	1,122	_	119	2,419	1,593	819	310	500	10,378
2	233	536	32	888	51	11	-	29	2,294
64	68		6	115	195	98	57	75	939
49	152	246	32	258	240	118	78	375	1,984
2,094	7,075	873	1,569	22,380	9,226	6,469	1,541	7,540	79,674

					Boo	dily locatio	n of injury			
				Upper	limbs	Lower	limbs	Mult-		
Nature of injury	Head and neck	Trunk, chest & abdomen	Pelvic region	Shoulder & arm	Hand & fingers	Hip & upper leg	Knee & lower leg	iple loca- tions	Other (a)	Total
Fractures & dislocations	263	987	40	1,325	2,432	63	2,172	134	2	7,418
Sprains & strains	1,601	19,968	500	5,575	1,845	428	8,170	2,160	27	40,274
Concussion & intracranial	1									
injuries	380	-	-	-	-	-	-	-	-	380
Hernias & other internal										
injuries	-	197	854	_	-	-	-	9	· -	1,060
Amputations & enucleation	ns 1	-	-	1	204	-	15	-	-	221
Lacerations & open wounds	1,073	77	19	724	8,123	166	1,850	180	3	12,215
Superficial injuries	1,673	27	2	74	368	25	261	77	4	2,511
Contusions & crushings	441	1,278	97	1,218	2,688	301	3,524	823	8	10,378
Burns & scalds	330	65	10	216	779	46	548	293	7	2,294
Multiple injuries	43	18	3	14	94	5	90	669	3	939
Other (b)	307	414	7	141	180	19	244	183	489	1,984
Total	6,112	23,031	1,532	9,288	16,713	1,053	16,874	4,528	543	79,674

<sup>(</sup>a) Includes bodily locations of injury not classified for lack of sufficient data. (b) Includes natures of injury not classified for lack of sufficient data.

TABLE 2.10 WORKPLACE INJURIES: EXTENT OF DISABILITY BY AGE GROUP AND SEX, N.S.W., 1986-87

						Age gro	цр (years)					
Extent of disability	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 & over	Total
					MAL	ES						
Fatal	5	3	5	5	7	6	7	6	6	2	1	63
Permanent disability												
Total	-	1		_	-	-	-	_	-	_	-	.1
Partial	99	142	150	118	123	113	84	81	80	42	9	1,049
Temporary disability	4,831	10,149	9,819	8,537	7,652	6,389	5,458	4,693	3,996	1,773	129	64,050
Total	4,935	10,295	9,974	8,660	7,782	6,508	5,549	4,780	4,082	1,817	139	65,163
					FEMAI	LES				·		
Fatal		1	_	_	_	-	1	_	_	_	_	2
Permanent disability												
Total	٠.	-	-	-	_	-	-	-	_	_	_	_
Partial	16	15	17	12	16	24	18	14	8	1	1	146
Temporary disability	1,218	2,004	1,734	1,637	1,943	1,822	1,644	1,249	744	199	15	14,363
Total	1,234	2,020	1,751	1,649	1,959	1,846	1,663	1,263	752	200	16	14,511

<sup>(</sup>a) Includes ages not stated.

# **SECTION 3**

# ROAD TRAFFIC ACCIDENT INJURIES

Road traffic accident injuries relate to road traffic accidents during a work related journey (ie excluding commuting accidents).

#### Incidence by industry, occupation (see Tables 3.1 and 3.2)

The Road transport industry recorded the highest incidence of road traffic accident injuries in 1986-87 with a little over 8 injuries per thousand workers. No other industry had more than 1.5 injuries per thousand workers.

Incidence of road traffic accident injuries is not available by occupation.

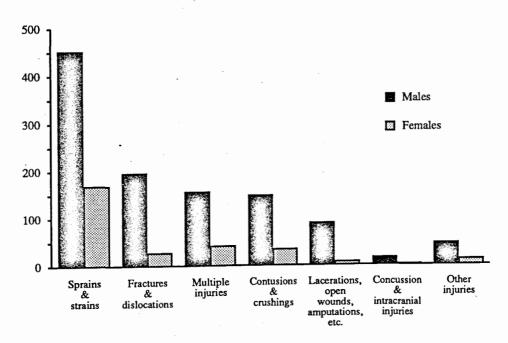
Occupations with the largest number of road traffic injuries were the Transport and communication group, which accounted for 535 injuries (37 per cent) and Tradesmen and labourers, with 419 injuries (29 per cent).

Almost 80 per cent of road traffic injuries in 1986-87 involved males and the overwhelming majority related to temporary disabilities.

# Nature of injury, age group (see Tables 3.3 and 3.4)

Fifty-five per cent of road traffic accidental injuries involving females and 40 per cent of those involving males resulted in Sprains and strains. There was a 35 per cent drop in road traffic accident injuries between 1985-86 and 1986-87 in the under 20 and 20-24 age groups. This is reflected in a 37 per cent drop in Fractures and dislocations, and a 22 per cent drop in Contusions and crushings.

# ROAD TRAFFIC ACCIDENTS BY NATURE OF INJURY AND SEX (Source of data: Table 3.3)



<sup>(</sup>a) Number of injuries per 1,000 workers. (b) Excludes the industry categories 'Rail transport', 'Services to air transport' and 'Communication', which were included in previous years. This results in a break in the series. See Explanatory Note 21.

TABLE 3.2 ROAD TRAFFIC ACCIDENTS: OCCUPATION (a) BY EXTENT OF DISABILITY AND SEX, N.S.W., 1986-87

		Ma	ales			Fen	nales	<u> </u>	
Occupation	Fatal -	Permanent disability	Temporary disability	Total cases	Fatal	Permanent disability	Temporary disability	Total cases	Persons
Professional, technical &									
related workers	2	-	33	35	1	-	46	47	82
Administrative, executive & managerial									
workers; and clerical workers	2	2	61	65	-	2	88	90	155
Sales workers	1	2	80	83	-	1	50	51	134
Farmers, fishermen, timbergetters &									
related workers	1 .	1	19	21	-	1	7	8	29
Miners, quarrymen & related workers	-		1	- 1	-	_	-	-	1
Workers in transport & communication	16	17	456	489	-	-	46	46	535
Tradesmen, production-process									
workers & labourers n.e.c.	6	12	366	384	-		35	35	419
Millers, bakers, butchers,						•			
brewers & related workers	-	· <u>-</u>	10	10	-	-	1	1	11
Metal workers, metal & electrical									
production-process workers n.e.c.	-	1	9	10	-		9	9	19
Bricklayers, plasterers & construction									
workers n.e.c.	-	1	12	13	-	-	-	-	13
Labourers n.e.c.	-	3	105	108	-		4	4	112
Machine toolmakers, metal									
machinists, etc. (b)	3	1	97	101	-	-	2	2	103
Other	3	6	133	142	•	-	19	19	161
Service, sport & recreation workers	1	1	54	56	-	-	30	30	86
Total (c)	29	35	1,075	1,139	1	. 4	303	308	1,447

<sup>(</sup>a) Incidence by occupation is not available. See Explanatory Note 16. (b) Included in 'other' in previous issues of this publication. (c) Includes occupations not stated.

33

TABLE 3.3 ROAD TRAFFIC ACCIDENTS: NATURE OF INJURY BY SEX, N.S.W.

Nature of Injury	Males	Females	Persons
Fractures & dislocations	198	29	227
Sprains & strains	454	171	625
Concussion & intracranial injuries	17	4	21
Hernias & other internal injuries	8		8
Amputations/enucleations	1	-	1
Lacerations & open wounds	90	9	99
Superficial injuries	10	2	12
Contusions & crushings	150	36	186
Burns and scales	5	_	5
Multiple injuries	158	43	201
Other (a)	48	14	62
Total	1,139	308	1,447

<sup>(</sup>a) Includes natures of injury not classified for lack of sufficient data.

TABLE 3.4 ROAD TRAFFIC ACCIDENTS: AGE GROUP BY SEX, N.S.W., 1986-87

Age group (years)	Males	Females	Persons
Under 20	71	27	98
20-24	175	51	226
25-29	176	63	239
30-34	177	42	219
35-39	133	43	176
40-44	120	30	150
45-49	94	27	121
50-54	80	11	91
55-59	70	10	80
60-64	31	1	32
65 and over	5	1	. 6
Total (a)	1,139	308	1,447

<sup>(</sup>a) Includes ages not stated.

# SECTION 4 OCCUPATIONAL DISEASES

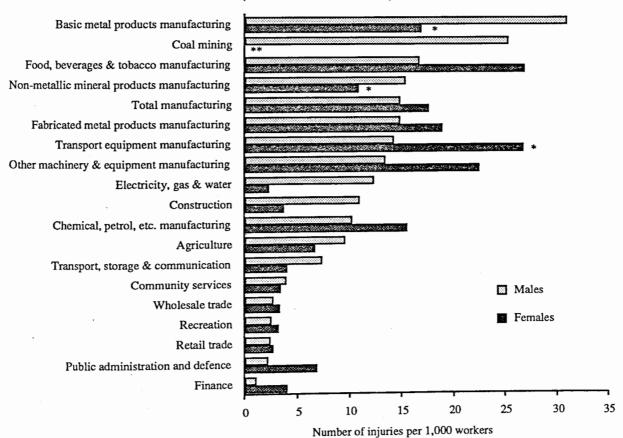
# Incidence by industry and sex (see Table 4.1)

During 1986-87, the highest incidences of occupational diseases for males were recorded in Mining (other than coal mining) with 40 cases per thousand workers, Basic metal products manufacture (31 cases per thousand workers) and Coal mining (25 per thousand). The lowest incidence was recorded in Finance, property and business services (1 case per thousand workers), well below the State average of 8 cases per thousand.

Industries with comparatively high incidences of occupational diseases for females included Food, beverages and tobacco manufacturing (27 cases per thousand workers) and the manufacture of Other machinery and equipment (22). This compared with the average for all industries of 5 cases per thousand female workers exposed to risk. The lowest risk industry was Electricity, gas and water, with 2 cases of occupational disease per thousand workers.

Closer inspection of the data for those high risk industries just mentioned reveals that, while in the vast majority of male cases the disease has resulted in a permanent disability, this is not the case among females. For example, 88 per cent of disease cases among males in the Mining industry and 87 per cent of disease cases in Basic metal product manufacturing resulted in permanent disability (mainly deafness). In the high risk industries for females, by contrast, 95 per cent and 96 per cent of diseases (manufacturing of Food, beverages and tobacco and of Other machinery and equipment, respectively) led to a temporary disability (mainly tenosynovitis and other musculoskeletal diseases).

# INCIDENCE OF OCCUPATIONAL DISEASES BY INDUSTRY AND SEX (Source of data: Table 4.1)



<sup>\*</sup> Subject to sampling variability too high for most practical purposes

# Occupational diseases by occupation and sex (see Table 4.2)

The incidence of occupational diseases by occupation is not available.

The occupation with the highest number of occupational diseases for males was the group Tradesmen, production-process workers and labourers with nearly 6,700 cases (about 70 per cent of the total).

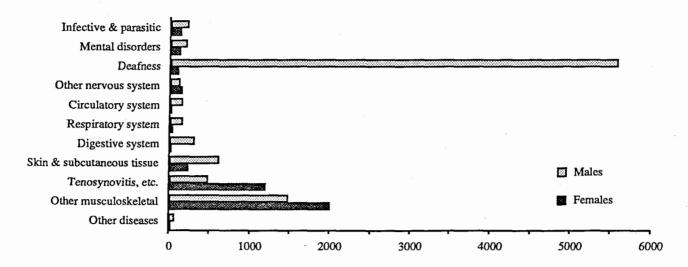
The same occupation group also had the highest number of females with occupational diseases (1,800 cases, about 44 per cent of the total). A considerable proportion (24 per cent) of diseases among women developed in the Administrative, executive, managerial and clerical professions.

#### Nature of disease (see Tables 4.4 and 4.5)

Deafness accounted for about 5,600 (almost 60 per cent) of the 9,442 cases of occupational diseases amongst male employees in 1986-87. Seventy-four per cent of deafness cases involved Tradesmen, production-process workers and labourers. The next most common disease group was Other diseases of the musculoskeletal system and connective tissue, with almost 1,500 cases. Seventy per cent of these related to Tradesmen etc. The number of occupational disease cases among males attributed to Deafness has decreased by almost 10 per cent since 1985-86, while Other musculoskeletal disease cases increased slightly by 2 per cent.

Among female workers, Tenosynovitis, bursitis, synovitis and Other diseases of the musculoskeletal system and connective tissue occurred in about 3,200 cases in 1986-87, accounting for almost 80 per cent of female cases of occupational disease. These were distributed across all industries, with relatively high numbers being recorded in: Finance, property and business services and manufacturing of Textiles, clothing and footwear, Food, beverages and tobacco, and Other machinery and equipment. Occupation categories most affected were: Tradesmen, production-process workers and labourers and Administrative, executive, managerial and clerical workers. The number of Tenosynovitis, bursitis and synovitis cases among females has decreased dramatically since 1985-86. This figure represents a reduction of 48 per cent on the 2,298 cases for 1985-86. Other diseases of the musculoskeletal system among females also decreased (by 24 per cent) in that period.

# OCCUPATIONAL DISEASES BY NATURE OF DISEASE AND SEX (Source of data: Table 4.4)



# Repetitive strain injury

The term repetitive strain injury (RSI) is commonly used to describe a variety of conditions caused by repetitive movements, or overuse of a part or parts of the body. Other terms commonly used are occupational overuse syndrome and cervicobrachial disorder. The main diseases that can be described as RSI are tenosynovitis, carpel tunnel syndrome, and epicondylitis. Most RSI cases are included in the following statistics in the nature of disease categories, Tenosynovitis, bursitis and synovitis and Other diseases of the musculoskeletal system and connective tissue.

As mentioned in the Nature of disease section above, there were 3,200 cases of female workers with Tenosynovitis, bursitis, synovitis and Other diseases of the musculoskeletal system and connective tissue in 1986-87. Their distribution among industries and occupations is discussed in that section.

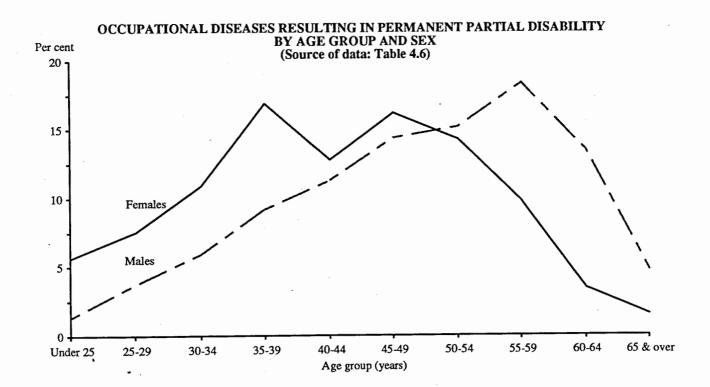
Almost 2,000 males were included in these two disease groupings in 1986-87 with 70 per cent coming from the Tradesmen etc. occupation group. Cases were spread through all industries, with the largest numbers occurring in the Construction and Food, beverages and tobacco manufacturing industries. These diseases represented 20 per cent of all male occupational diseases in 1986-87.

# Occupational diseases by age group (see Table 4.6)

Female occupational diseases showed quite high levels of occurrence throughout the 20-49 years age range, with the peak in the 35-39 age group in 1986-87. This latter group accounted for 15 per cent of the total.

Male occupational diseases, by contrast, increased steadily with age until they reached a peak in the 55-59 age group. This group also accounted for 15 per cent of the total.

With males, age of occurrence varied with type of disability e.g. while permanent partial disabilities increased with age to 55-59, temporary disabilities reached a peak much earlier at 25-29 years, then declined slowly to 50-54. In the case of females with permanent partial disabilities, relatively small numbers were fairly evenly spread through 25 to 59 years, with peaks at 35-39 and 45-49. For temporary disabilities, quite large numbers of cases occurred in the range 20 to 49, with the maximum at 35-39.



				Males	•	
		Permane	ent disability			
Industry	Fatal	Total	Partial	Temporary disability	Total cases	Incidence (a)
Agriculture, forestry, fishing &						
hunting	2	-	53	226	281	9.5
Mining	3	-	698	91	792	29.1
Coal	-	-	463	41	504	25.2
Other	3		235	50	288	40.1
Manufacturing	15	-	2,900	1,608	4,523	14.8
Food, beverages & tobacco	. 4	~	187	455	646	16.6
Textiles, clothing & footwear	2	-	49	53	104	8.3
Wood, wood products & furniture Paper, paper products,	1		. 89	102	192	9.7
printing & publishing	1		108	89	198	7.3
Chemicals, petroleum & coal products	1		96	82	179	10.2
Non-metallic mineral products	1	_	143	90	234	15.3
Basic metal products	2	_	962	147	1,111	30.8
Fabricated metal products	-	_	304	165	469	14.8
Transport equipment		_	617	121	738	14.0
Other machinery & equipment	3	_	305	248	556	13.4
Miscellaneous manufacturing	-	-	40	56	96	7.0
Electricity, gas & water	2	_	427	101	530	12.3
Construction	9	_	709	444	1,162	10.9
Wholesale trade	5	-	110	149	264	2.7
Retail trade	1	-	66	215	282	2.4
Transport, storage & communication	4	<u>-</u>	617	160	781	7.3
Road transport	3	-	64	80	147	4.3
Other	1	-	553	80	634	11.5
Finance, property & business services	5		41	70	116	1.1
Public administration & defence		-	35	78	113	2.2
Community services	5	-	105	361	471	3.9
Health	4	-	25	117	146	4.3
Education, museum & library services	1	-	39	131	171	3.0
Other	-		41	113	154	5.2
Recreation, personal & other services	1	-	21	105	127	2.5
Fotal	52	-	5,782	3,608	9,442	8.0

<sup>(</sup>a) Number of injuries per 1,000 workers. (b) Excludes the industry categories 'Rail transport', 'Services to air transport' and 'Communication', which were included in previous years. This results in a break in the series. See Explanatory Note 21.

		I	Temales			I	Persons
	Permanent	disability					
Fatal	Total	Partial	Temporary disability	Total cases	Incidence (a)	All cases	Incidence (a)
	_	_	46	46	6.6	327	8.9
-	-	1	8	9	*6.1	801	27.9
-	-	-	2	2	**	506	24.5
-	-	1	6	7	**	295	36.6
_	<u>-</u>	172	1,569	1,741	17.5	6,264	15.5
-	_	19	367	386	26.8	1,032	19.3
_	_	47	328	375	16.6	479	13.6
-	-	4	20	24	6.6	216	9.2
_		8	116	124	7.8	322	7.5
_	_	8	108	116	15.5	295	11.8
	_	4	19	23	*10.8	257	14.8
_		25	26	51	*16.8	1,162	29.7
_	_	17	100	117	18.8	586	15.5
-	_	8	53	61	*26.7	799	15.3
-	_	15	333	348	22.2	904	15.9
 -	-	17	99	116	19.0	212	10.7
			13	13	2.3	543	11.1
-	-	3	37	40	3.7	1,202	10.2
-	-	9	131	140	3.3	404	2.9
-	-	13	357	370	2.7	652	2.5
		17	66	83	(b)4.0	864	(b)6.5
- '	-	6	16	22	3.8	169	4.3
-	-	11	50	61	(b)4.1	695	(b)9.1
		15	447	463	4.0	579	2.6
1 -		2	121	123	6.8	236	3.4
		17	791	808	3.4	1,279	3.5
-	-	17	422	432	3.9	578	4.0
-	-	10	250	255	2.8	426	2.8
-		5 2	119	121	3.2	275	4.1
-		17	215	232	3.2	359	2.9
1	•	266	3,801	4,068	(b)5.3	13,510	(b)6.9

TABLE 4.2 OCCUPATIONAL DISEASES:

			Males		
		Permo	anent disability		
Occupation	Fatal	Total	Partial	Temporary disability	Total cases
Professional, technical &					
related workers	4	-	106	160	270
Administrative, executive &					
managerial workers; and					
clerical workers	6	-	171	185	362
Sales workers	-	-	17	55	72
Farmers; fishermen, timbergetters &					
related workers	1	-	62	258	321
Miners, quarrymen & related workers	2	-	334	70	406
Workers in transport & communication	5	-	482	182	669
Tradesmen, production-process workers					
& labourers n.e.c. Millers, bakers, butchers, brewers	31	-	4,244	2,417	6,692
& related food & drink workers Metal workers, metal & electrical	2		97	333	432
production-process workers n.e.c. Bricklayers, plasterers &	-	-	364	185	549
construction workers n.e.c.	-	-	179	89	268
Labourers n.e.c. Machine toolmakers, metal	12	-	993	531	1,536
machinists, etc. (b)	2		1.047	40.4	
Other	2 15		1,247 1,364	486 793	1,735 2,172
Service, sport & recreation workers	3	-	130	272	405
Total (c)	52	-	5,782	3,608	9,442

<sup>(</sup>a) Incidence by occupation is not available. See Explanatory Note 16. (b) Included in 'other' in previous issues of this publication.

<sup>(</sup>c) Includes occupations not stated.

41

# OCCUPATION (a) BY EXTENT OF DISABILITY AND SEX, N.S.W., 1986-87

		Persons				ales	Fen		
A 11	<i>T</i>	ıt disability	Permaner		T-1-1	T	ıt disability	Permanei	
All cases	Temporary disability	Partial	Total	Fatal	Total cases	Temporary disability	Partial	Total	Fatal
593	477	112	-	4	323	317	6	-	-
1,333	1,113	214	. <del>-</del>	. 6	971	928	43	-	-
270	247	23	-	-	198	192	6	-	-
364	301	62	-	1	43	43	-	-	-
406	70	334	-	2	-	-	-	-	· -
697	206	486	-	5	28	24	4	•	-
8,475	4,025	4,418	-	32	1,783	1,608	174	-	. 1
704	590	112	-	2	272	257	15	-	-
975	580	395	-	-	426	395	31	-	-
270	90	180	_	-	2	1	1	_	
1,644	612	1,020	-	12	108	81	27	-	-
1,804	549	1,253		2	69	63	6	-	_
3,078	1,604	1,458	-	16	906	811	94	-	1
1,120	955	162	-	3	715	683	32	<u>-</u>	-
13,510	7,409	6,048	- '	53	4,068	3,801	266		1

			Occ	cupation		
Industry	Professional, technical & related workers	Admin., exec. & managerial workers; clerical workers	Sales workers	Farmers, fishermen, elc.	Miners, quarrymen & related workers	Workers in transport & commun- ication
Agriculture, forestry, fishing &						
hunting	4	7	1	286	-	2
Mining	11	22	-	1	393	16
Coal	4	. 5	-	_	238	1
Other	7	17	·	1	155	15
Manufacturing	. 57	233	25	12	4	112
Food, beverages & tobacco	6	23	5	4	-	22
Textiles, clothing & footwear	-	10	1	<b>-</b>	-	22
Wood, wood products, &	_		1	-	-	2
furniture		. 6	4	5		_
Paper, paper products,	-	. 0	4	3	-	5
printing & publishing	8	51	4	1		4
Chemicals, petroleum & coal	0	31	4	1	-	4
products	2	18	1			7
Non-metallic mineral products	L	8	1	1	1	7
Basic metal products	15	31	1		1	10
Fabricated metal products	3		1		2	22
Transport equipment		20	2	1	-	7
Other machinery & equipment	12	22	1	•	-	18
Miscellaneous manufacturing	-	40 4	4 2	-	-	11 4
Electricity, gas & water		22	•			
Construction	16	32	2	1		33
Wholesale trade	6	26	2	17	5	84
Retail trade	6	68	11	5	1	19
Retail dade	3	112	214	1	-	4
Transport, storage & communication	9	102	3	3	1	385
Road transport	-	22	-	1	-	95
Other	9	80	3	2	-	290
Finance, property & business services	13	311	6	3	-	14
Public administration & defence	22	133	-	14	1 1	4
Community services	438	242	-	12	1	19
Health	173	· 71	-	4	• -	7
Education, museum & library service		104	-	7		2
Other	19	67	-	1	1	10
Recreation, personal & other services	8	45	6	9		5
'otal	593	1,333	270	364	406	697

<sup>(</sup>a) Included in 'other' in previous issues of this publication. (b) Includes occupations not stated.

			Оссир	ation			
	7	radesmen, productio	on-process wor	kers & labourers n.e.c.		Service,	
Millers, bakers, etc.	Metal workers, etc.	Bricklayers, plasterers, etc.	Labourers n.e.c.	Machine tool makers, metal machinist, etc. (a)	Other	sport & recreation workers	Total (b)
	-						
5	-	. 1	-	5	12	2	327
_	2	6	_	85	65	8	801
· · · <u>-</u>	-	1	_	50	18	1	506
-	2	5	_	35	47	7	295
599	886	39	955	1,263	1,954	88	6,264
593	10	-	157		153	18	1,032
-	5	-	18	18	409	16	479
-	10	4	22	13	144	2	216
1	8	2	54	10	173	4	322
2	1.4	•	21	31	188	5	295
3	14 9	1 8	59	23	132	4	257
-	128	17	378	262	268	24	1,162
-	133	4	65	261	79	3	586
1	167	1	80	363	131	3	799
1	390	2	77	232	125	7	904
1	12	-	24	12	152	2	212
	12						
_	27	92	82	66	176	16	543
	22	116	439	174	292	13	1,202
32	20	4	50		141	5	404
66	3	2	35	76	114	20	652
_		•	33	49	209	54	864
2	11	1	18		19	3	169
-	- 11	1	15		190	51	695
2	. 11	-	15	-12	.,,		
	_	2	10	. 9	17	193	579
		3	5		17	21	236
=	2	3	25		60	456	1,279
_	-	2		10	35	276	578
<u>-</u>	- · · -	1	7		13	42	426
<u>.</u> .	2	-	18	7	12	138	275
_	2	. 1	10	4	21	244	359
704	975	270	1,644	1,804	3,078	1,120	13,510

				Nature of	disease	
Industry	Infective & parasitic diseases	Neo- plasms	Mental disorders	Deafness	Other diseases of the nervous system & sense organs	Disease of th circulator systen
		М	ALES			
Agriculture, forestry, fishing &						
hunting	27	-	2	30	6	12
Mining	3	<u>.</u> .	2	688	3	. 2
Coal	-	-	1	462	1	
Other	3	-	1	226	.2	2
Manufacturing	119	4	16	2,802	51	34
Food, beverages & tobacco	109	. 1	2	170	11	4
Textiles, clothing & footwear Wood, wood products &	-	-	. 1	46		2
furniture Paper, paper products,	. <del>-</del>	<del>-</del>	3	85	1	1
printing & publishing	1			94	•	
Chemicals, petroleum & coal	1	-	-	. 94	2	4
products	1	1	2	92		
Non-metallic mineral products	2	1	-	128	3	3
Basic metal products	1	1	3	953	9	6
Fabricated metal products	3		1	297	8	1
Transport equipment		-		610	-	. 1
Other machinery & equipment	1	-	3	289	13	8
Miscellaneous manufacturing	. 1	-	1	38	4	-
Electricity, gas & water	٠_	13	1	421	4	3
Construction	8	23	6	689	18	17
Wholesale trade	8	1	2	101	7	6
Retail trade	. 8	1	8	57	6	7
Transport, storage & communication	17	-	13	603	8	12
Road transport	2	-	6	56	4	9
Other	15	-	7	547	4	3
Finance, property & business services	-	-	15	31	1 ,	18
Public administration & defence	2	6	14	34	4	4
Community services	29	2	122	98	13	31
Health	12	1	19	23	7	13
Education, museum & library services	12	1	50	35	6	13
Other	5	-	53	40	•	5
ecreation, personal & other services	-	1	4	18	1	13
'otal	221	51	205	5,572	122	159

For footnotes, see end of table.

			Nature	of disease			
Diseases of the respiratory system	Diseases of the digestive system	Diseases of the genito- urinary system	Diseases of the skin & subcutaneous tissue	Tenosynovitis, bursitis & synovitis	Other diseases of the musculo- skeletal system & connective tissue	Other (a)	Total
			MA	ALES			
5	9	-	19	39	130	2	281
2	1	-	37	5	47	2	792
-	1	_	25	.4	8	2	504
2	-	-	. 12	1	39	-	288
90	135	3	290	235	716	28	4,523
14	24	-	109	59	140	3	646
-	8	-	4	16	26	1	104
. 4	18	-	8	15	55	2	192
7	13	1	14	13	. 48	1	198
7	4		18	6	43	1	179
20	5	-	19	11	42	-	234
10	7	2	36	12	62	9	1,111
5	26	-	24	21	79	4	469
12	5	-	21	14	71	4	738
10	18	• -	28	59	124	3	556
1	7	-	9	9	26	-	96
3	. 3	_	24	7	49	2	530
20	48	_	81	60	179	13	1,162
14	19	_	20	16	68	2	264
2	31	-	30	36	95	1	282
_	17	_	21	10	68	12	781
_	11	_	11	4	39		147
-	6	-	10	6	29	5 7	634
3	4		7	10	27	_	116
-	6		16	10	12	5	113
4.0			20	36	56	3	471
16	27	-	38	17	13	-	146
7	13	-	21	17	17	2	171
7	. 7 7	-	9	7	26	1	154
2	,	-	0	,		•	
2	10		30	16	32	-	127
157	310	3	613	480	1,479	70	9,442

			Na	ture of disease		
	Infective &				Other diseases of the	Disease: of the
Industry	parasitic diseases	Neo- plasms	Mental disorders	Deafness	nervous system & sense organs	circulatory system
	-	FEN	MALES			
Agriculture, forestry, fishing &						
hunting	-	-	1	-	6	1
Mining	-		_	. • • • • • • • • • • • • • • • • • • •	-	
Coal		· -	•		-	-
Other	-	-	. · · · ·	<del>-</del>	-	-
Manufacturing	16	_	9	80	42	5
Food, beverages & tobacco	15		2	6	11	2
Textiles, clothing & footwear	_	_	1	13	6	1
Wood, wood products &			-			•
furniture	-	-	-	1	_	1
Paper, paper products,				-		•
printing & publishing	-	_	1	. 1	5	_
Chemicals, petroleum & coal			_	_	•	
products	-	-	-	2	1	-
Non-metallic mineral products	-	-	-	2	-	
Basic metal products	-	-		25	2	-
Fabricated metal products	1	-	1	13	4	-
Transport equipment	-		-	3	1	
Other machinery & equipment	-	-	3	8	9	-
Miscellaneous manufacturing	,	-	1	6	3	1
Electricity, gas & water	_	-			-	
Construction	-	-	-	2	3	-
Wholesale trade	3	-	-	1	2	-
Retail trade	1	-	10	2	11	4
Transport, storage & communication	13	-	1	10	6	<u>.</u>
Road transport	-	-	-	1	2	-
Other	13	-	1	9	4	-
Finance, property & business services		-	12	1	21	1 .
Public administration & defence	•	-	9	1	6	1
Community services	100		77	7	44	12
Health	65	-	7	7	27	. 7
Education, museum & library services	30	-	48	-	10	5
Other	5	-	22	-	7	-
Recreation, personal & other services	1	-	7	4	9	4
l'otal	134	-	126	108	150	28

<sup>(</sup>a) Includes diseases not classified for lack of sufficient data.

Diseases of the respiratory system	Diseases of the digestive system	Diseases of the genito- urinary	Diseases of the skin & subcutaneous tissue	Tenosynovitis, bursitis	Other diseases of the musculo- skeletal system & connective tissue	Other	Total
system	system	system	ussue	& synovitis	connective tissue	(a)	
		<del> </del>	FEM	IALES		· · · · · · · · · · · · · · · · · · ·	
	-	_	6	10	22		46
			•				
-	-	-	-	2	7	-	9
-	-	· -	-	. 1	1	-	2
7	-	-		1	6	-	7
6	4		51	491	1,033	4	1,741
1	-	_	15	105	229	-	386
1	1	-	9	120	221	2	375
, <del>-</del>	-	-	-	9	13	-	24
-		-	2	38	77	-	124
_	_	-	5	25	82	1	116
1	1	-	1	6	12	-	23
1	1	-	2	6	13	1	51
	-	-	4	31	63	-	117
-	-	-	4	14	39	-	61
2	1	-	8	103	214	-	348
-	-	-	. 1	34	70	-	116
_			_	6	7	-	13
1	· .	_	5	14	15	-	40
3	_	_	1	37	93		140
4	4	-	24	72	235	3	370
	1	_	_	23	27	2	83
- -	-	_	_	12	7	-	22
-	1 .	-	<del>-</del>	11	20	2	61
•	1		21	160	240	3	463
3 2	1	-	-	90	13	1	123
2		•		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		_	
23	11	-	81	251	190	12	808
5	9 ·	-	59	140	101	5 5	432
18	. 1	_	15	65	58	5	255
-	1	<del>-</del> .	7	46	31	2	121
2	-	-	48	36	119	2	232
			237	1,192	2,001	27	4,068

TABLE 4.5 OCCUPATIONAL DISEASES: OCCUPATION BY

			Natu	re of disease		
Occupation	Infective & parasitic diseases	Neo- plasms	Mental disorders	Deafness	Other diseases of the nervous system & sense organs	Disease of th circulator system
		N	IALES			
Professional, technical &						
related workers	16	2	66	101	9	14
Administrative, executive & managerial workers; and						
clerical workers	4	2	39	163	4	35
Sales workers	2	-	6	13	-	8
Farmers, fishermen, timbergetters &					-	
related workers	27	6	2	39	7	12
Miners, quarrymen & related workers	1	-	2	326	3	-
Workers in transport & communication	ı 6	3	8	464	6	17
Tradesmen, production-process worker	s					
& labourers n.e.c. Millers, bakers, butchers, brewers	144	32	29	4,110	82	60
& related food & drink workers  Metal workers, metal & electrical	66	2	2	85	12	2
production-process workers n.e.c. Bricklayers, plasterers &	2	-	-	351	6	3
construction workers n.e.c.	-	6	3	176	2	4
Labourers n.e.c. Machine toolmakers, metal	53	14	6	973	18	19
machinists, etc. (b)	7	1	3	1,222	20	. 8
Other	16	9	15	1,303	24	24
Service, sport & recreation workers	20	6	52	122	10	12
Total (c)	221	51	205	5,572	122	159

For footnotes, see end of table.

NATURE OF DISEASE AND SEX, N.S.W., 1986-87

			Nature	of disease			
Diseases of the respiratory system	Diseases of the digestive system	Diseases of the genito- urinary system	Diseases of the skin & subcutaneous tissue	Tenosynovitis, bursitis & synovitis	Other diseases of the musculo- skeletal system & connective tissue	Other (a)	Total
			MA	ALES			
9	9	-	9	13	21	1	270
8	15	· ·	4	25	63	-	362
1	6	-	5	4	26	1	72
3	10	-	28	42	142	3	321
2	2	-	30	3	36	1	406
7	17	-	21	15	95	10	669
122	224	3	452	348	1,036	50	6,692
5	17	-	76	58	104	3	432
5	13	· <u>-</u>	32	37	98	2	549
6	10	_	16	10	32	3	268
21	44	-	119	64	200	5	1,536
24	53	-	92	73	218	14	1,735
61	87	3	117	106	384	23	2,172
3	27	-	63	30	56	4	405
157	310	3	613	480	1,479	70	9,442

TABLE 4.5 OCCUPATIONAL DISEASES: OCCUPATION BY

			Na	ture of disease		
Occupation	Infective & parasitic diseases	Neo- plasms	Mental disorders	Deafness	Other diseases of the nervous system & sense organs	Disease of th circulator system
		FE	MALES			
Professional, technical & related workers	74		43	1	12	
Administrative, executive & managerial workers; and						
clerical workers	6	-	45	6	22	4
Sales workers	1	-	. 9	1	5	3
Farmers, fishermen, timbergetters &					-	
related workers	-	-	2	-	. 5	1
Miners, quarrymen & related workers	-	-	-	-	-	-
Workers in transport & communication		-	2	4	1	
Tradesmen, production-process worker	s					
& labourers n.e.c. Millers, bakers, butchers, brewers	18	-	4	82	50	5
& related workers  Metal workers, metal & electrical	4	. <b>-</b>	1	6	9	1
production-process workers n.e.c. Bricklayers, plasterers &	-	-	. 1	18	9	1
construction workers n.e.c.	-	-	-	1	_	-
Labourers n.e.c. Machine toolmakers, metal	4	-	1	23	7	-
machinists, etc. (b)	-	-	-	3	2	· <u>-</u>
Other	10	-	1	31	23	3
Service, sport & recreation workers	35	-	21	13	55	6
Γotal (c)	134		126	108	150	28

<sup>(</sup>a) Includes diseases not classified for lack of sufficient data. (b) Included in 'other' in previous issues of this publication. (c) Includes occupations not stated.

# NATURE OF DISEASE AND SEX, N.S.W., 1986-87 (continued)

			Nature	of disease			
Diseases of the respiratory system	Diseases of the digestive system	Diseases of the genito- urinary system	Diseases of the skin & subcutaneous tissue	Tenosynovitis, bursitis & synovitis	Other diseases of the musculo- skeletal system & connective tissue	Other (a)	Total
			FEM	ALES			
14	7	7	35	60	61	8	323
13	1	· -	4	394	475	1	971
3	2	-	15	34	122	3	198
	-	-	5	10	20	-	43
-	-	-		-	· •	-	-
1	<b>-</b>	-	-	7	10	3	28
9	6	-	64	505	1,037	. 3	1,783
1	-	-	13	75	162	-	272
2	. 1	-	14	122	258	-	426
-	-		_	1	-	-	2
1	-	-	8	23	40	1	108
5	1 4	· -	2 27	29 255	32 545	2	69 906
4	5		114	181	272	9	715
44	21		237	1,192	2,001	27	4,068

TABLE 4.6 OCCUPATIONAL DISEASES: EXTENT OF DISABILITY BY AGE GROUP AND SEX, N.S.W., 1986-87

	Age group (years)													
Extent of disability	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 & over	Total		
					MALES									
Fatal Permanent disability	-	2	1	1	2	6	9	14	11	2	-	52		
Total Partial	9	64	212	344	532	651	835	- 877	1,066	- 779	274	5,782		
Temporary disability	161	383	446	442	430	430	416	398	295	155	12	3,608		
Total	170	449	659	787	964	1,087	1,260	1,289	1,372	936	286	9,442		
					FEMALE	S								
Fatal Permanent disability	•	-	1	-	- -	-	-	<u>-</u>			-	1		
Total	-	-	_	-	-	-	_	-	-	-	-	-		
Partial	5	10	20	29	45	34	43	38	26	9	4	266		
Temporary disability	203	463	557	464	567	526	474	327	137	35	2	3,801		
Total	208	473	578	493	612	560	517	365	163	44	6	4,068		

<sup>(</sup>a) Includes ages not stated.

# **SECTION 5**

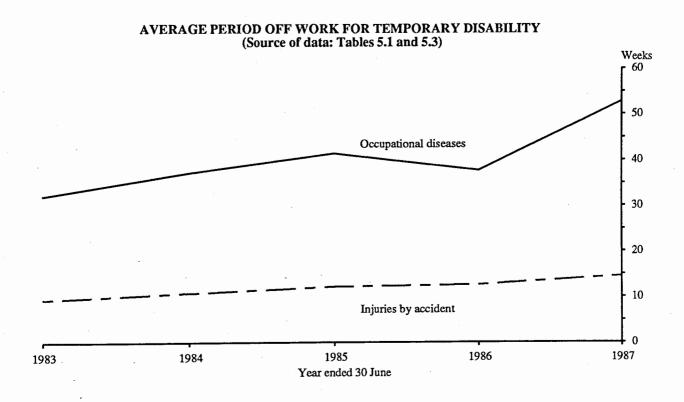
# **EMPLOYMENT INJURIES: SEVERITY**

This section presents data on two summary indicators of the severity of employment injuries in the economy. The first is the average period off work for new cases where the injury results in a temporary disability. The greater the period off work, the more 'severe' the injury. The second, an indication of the cost of employment injuries, is provided by data on total compensation payments and average payments per case. The compensation measure of severity includes all levels of disability. Both measures exclude injuries which resulted in incapacity for less than three days.

For new cases not finalised at the end of the reference period, estimates by the insurer of the expected future period off work and future liability for compensation payments are included. Because of this, care should be exercised in comparing data across years and between industries, as some part of the difference may be attributable to differing administrative practices.

# AVERAGE PERIOD OFF WORK: Injury by accident

The average period off work for cases involving injury by accident and resulting in a temporary disability has increased from just over 9 weeks in 1982-83 to 14.5 weeks in 1986-87. This represents a 56 per cent increase in 4 years. In 1986-87, 58 per cent of the 89,920 accident cases resulted in periods off work of less than 3 weeks.



#### Industry (see Table 5.1)

In 1986-87, the Textiles, clothing and footwear manufacturing industry recorded an average period off work of 29 weeks, twice the State average of 14.5 weeks. Other industries with above average periods off work included Miscellaneous manufacturing (21 weeks), the manufacture of Non-metallic mineral products (20 weeks), and Health (20 weeks). By contrast, Coal mining (4 weeks) and Electricity, gas and water (7 weeks) recorded average periods off work well below the State average. The fact that almost 60 per cent of accidents in the Coal mining industry (leading to a temporary disability) resulted in periods off work of less than two weeks accounts for the low average period off work in this industry despite its very high incidence of injury.

### Occupation (see Table 5.2)

The occupation with the highest average period off work in 1986-87 was Service, sport and recreation workers (19 weeks). This was more than 30 per cent above the rate for all occupations (14.5 weeks). Other occupations with above average rates included Metal workers, metal and electrical production-process workers (18 weeks) and Bricklayers, plasterers and construction workers (18 weeks). By far the least time off work occurred with Miners, quarrymen and related workers, with an average of 5 weeks. Extended periods off work (6 months or more) accounted for a considerable proportion of cases among Professional, technical and related workers (19 per cent) and Service, sport and recreation workers (18 per cent), but were least likely to apply to Miners, quarrymen and related workers (3 per cent of cases). This is of course consistent with the industry discussion above.

# AVERAGE PERIOD OFF WORK: Occupational diseases

The average period off work for occupational diseases resulting in a temporary disability increased from 32 weeks in 1982-83 to 53 weeks in 1986-87, a rise of 65 per cent in 4 years. There was a 40 per cent rise in the last year.

In 1986-87, 30 per cent of cases had periods off work of less than 3 weeks. At the other extreme, 37 per cent of cases, the most severe ones, had periods off work of 6 months or more. The proportion of cases falling into this 'most severe' category has increased from 23 to 37 per cent of cases in 4 years.

# Industry (see Table 5.3)

During 1986-87, the Textiles, clothing and footwear manufacturing industry (86 weeks) and Other mining (83 weeks) recorded average periods off work significantly higher than the State average of 53 weeks. Coal mining, with an average rate of 7 weeks, was well below the State average.

#### Occupation (see Table 5.4)

The occupation groups Miners, quarrymen and related workers (74 weeks) and Metal workers, metal and electrical production-process workers (72 weeks) had average periods off work well above the 1986-87 average for all occupations (53 weeks). Labourers n.e.c. (36 weeks) and Professional, technical and related workers (39 weeks), by contrast, were well below this average for all occupations. Cases resulting in absences for 6 months or longer were fairly evenly distributed through all occupation groups.

#### Nature of disease (see Table 5.5)

The most prevalent occupational disease groups resulting in a temporary disability in 1986-87 were Other diseases of the musculoskeletal system and connective tissue, which had about 3,300 cases and an average period off work of 68 weeks and Tenosynovitis, bursitis and synovitis with about 1,600 cases and an average of 50 weeks.

These two disease groups (which together include cases commonly described as RSI) accounted for two-thirds of all cases and 78 per cent of the most severe ones (i.e. cases with periods off work of 26 weeks or more).

Although the average period off work for these two disease groups has increased significantly since 1985-86 (up from 49 weeks to 68 weeks, and from 36 weeks to 50 weeks respectively), the number of cases has fallen sharply (down from about 6,700 to 4,900).

#### COMPENSATION PAYMENTS

New cases (see Table 5.6)

Compensation payments for *new cases* comprise payments made in the reference period for cases first reported in the period, plus an estimate of future liability.

Average compensation payments for new cases in 1986-87 amounted to \$6,200 for all employment injuries. The average payment for an occupational disease (\$8,600) was considerably higher than the average for an injury by acident (\$5,900), reflecting the fact that occupational diseases are much more likely to result in a permanent disability than are injuries by accident.

Industries with average payments well above the State average included Textiles, clothing and footwear manufacturing (\$9,600) and Coal mining (\$8,800) in the case of accidents and Textiles, clothing and footwear manufacturing (\$17,000), Other community services (\$16,300) and Road transport (\$15,300) in the case of occupational diseases.

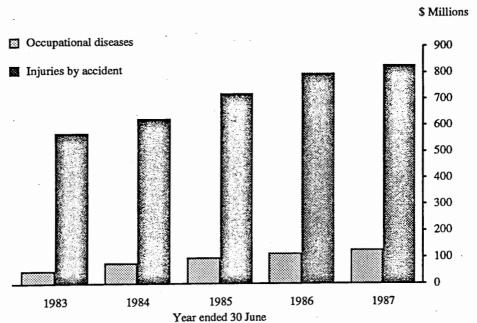
Between 1982-83 and 1985-86, average compensation paid for new cases increased by 50 per cent in the case of accidents and by 76 per cent for occupational diseases. Over the last year, however, there has been a slight decrease in the average amount of compensation paid in both types of injury (by around 2 per cent).

Total compensation payments made for new cases during 1986-87 also represent a change on previous trends. Between 1982-83 and 1985-86, total amounts paid for both injuries by accident and occupational diseases steadily increased from \$414 million to \$594 million and from \$75 million to \$141 million respectively. However, over the period 1985-86 to 1986-87, both categories of payment decreased, by 10 per cent and 17 per cent respectively.

Year of payment (see Table 5.7)

Compensation payments data on a year of payment basis include all compensation payments made during the reference year. These include payments for cases first reported in earlier years and exclude payments yet to be made for claims not yet finalised.

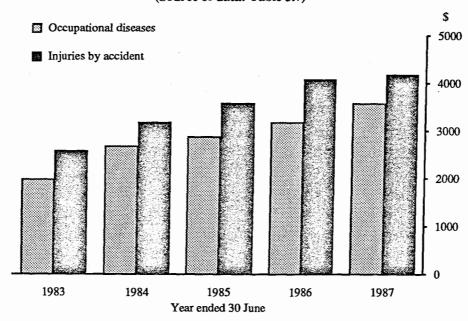
### YEAR OF PAYMENT: TOTAL COMPENSATION PAYMENTS FOR OCCUPATIONAL DISEASES AND INJURIES BY ACCIDENT (Source of data: Table 5.7)



Average compensation payments for the year 1986-87, including ongoing and reopened cases, rose to \$4,200 for injuries by accident and to \$3,600 for occupational diseases. On average, the highest payments for injuries by accident were made in the industry categories Other mining (\$6,800), Basic metal products manufacturing (\$6,300) and Non-metallic mineral products manufacturing (\$5,900). For occupational diseases, average payments were highest to workers in Textile, clothing and footwear manufacturing (\$5,400), followed by other categories of Manufacturing.

In contrast to the trend observed for payments made in respect of new cases, average compensation paid in this reference year has continued to increase, adding 2 per cent to the 1985-86 figure for injuries by accident and 12 per cent to the figure for occupational diseases (an increase of 5 per cent over all employment injuries).

### YEAR OF PAYMENT: AVERAGE COMPENSATION PAID PER CASE FOR OCCUPATIONAL DISEASES AND INJURIES BY ACCIDENT (Source of data: Table 5.7)



Similarly, total compensation payments made have continued their increasing trend, rising by 4 per cent for injuries by accident and by 11 per cent for occupational diseases since 1985-86. A total of almost \$960 million was paid for all employment injuries in 1986-87.

TABLE 5.1 NEW CASES OF INJURY BY ACCIDENT RESULTING IN A TEMPORARY DISABILITY: INDUSTRY BY DURATION OF PERIOD OFF WORK AND AVERAGE PERIOD OFF WORK, N.S.W., 1986-87

				Duration	of period of	ff work (com	pleted week	s)				
Industry	Under 1	1	2	3	4-5 (Numb	6-7 er of cases)	8-12	13-25	26-51	52 or more	All cases	Average period off work (a) (weeks)
Agriculture, forestry, fishing & hunting	305	571	313	197	265	129	171	198	155	191	2,495	18.4
Mining	1,676	2,054	850	427	440	240	293	239	125	58	6,402	4.6
Coal	1,498	1,820	736	382	379	215	251	182	89	30	5,582	3.6
Other	178	234	114	45	61	25	42	57	36	28	820	10.9
Manufacturing	5,449	7,437	2,921	1,617	1,865	1,148	1,631	1,593	1,138	1,874	26,673	15.6
Food, beverages & tobacco	1,032	1,593	602	300	332	186	285	263	162	306	5,061	13.4
Textiles, clothing & footwear	196	283	131	67	85	40	61	78	70	151	1,162	28.7
Wood, wood products & furniture	325	463	196	116	135	82	131	109	71	154	1,782	18.5
Paper, paper products, printing & publishing	309	426	162	99	111	76	113	99	75	115	1,585	15.7
Chemicals, petroleum & coal products	246	321	137	88	92	53	73	87	74	95	1,266	17.2
Non-metallic mineral products	253	341	124	77	88	57	78	83	56	117	1,274	20.4
Basic metal products	706	770	310	211	218	153	226	197	102	105	2,998	10.0
Fabricated metal products	774	1,065	395	212	260	158	184	200	159	225	3,632	13.7
Transport equipment	459	619	289	128	157	101	153	151	112	146	2,315	15.8
Other machinery & equipment	943	1,264	450	260	304	193	259	243	200	341	4,457	15.5
Miscellaneous manufacturing	206	292	125	59	83	49	68	83	57	119	1,141	21.2
Electricity, gas & water	648	916	438	238	310	155	163	159	108	63	3,198	6.8
Construction	2,364	3,301	1,490	745	1,022	509	753	701	656	1,007	12,548	15.3
Wholesale trade	840	1,137	498	253	337	197	267	256	188	275	4,248	14.6
Retail trade	1,527	2,131	900	418	567	293	429	434	305	450	7,454	13.5
Transport, storage & communication	1,046	1,594	764	474	523	322	407	435	253	313	6,131	12.9
Road transport	450	709	337	173	240	142	181	200	131	192	2,755	15.6
Other	596	885	427	301	283	180	226	235	122	121	3,376	10.7
Finance, property & business services	691	827	398	213	259	138	199	231	214	310	3,480	17.0
Public administration & defence	384	444	160	98	140	58	82	93	126	134	1,719	15.6
Community services	2,332	2,933	1,180	600	876	377	584	680	1,067	1,211	11,840	17.3
Health	1,281	1,676	683	349	486	212	326	364	660	796	6,833	19.5
Education, museum & library services	525	534	207	103	169	73	101	139	207	166	2,224	13.2
Other	526	723	290	148	221	92	157	177	200	249	2,783	15.1
Recreation, personal & other services	586	994	470	238	299	190	256	249	177	273	3,732	17.3
Total	17,848	24,339	10,382	5,518	6,903	3,756	5,235	5,268	4,512	6,159	89,920	14.5

<sup>(</sup>a) Excludes cases with period off work greater than 10,000 calendar days.

TABLE 5.2 NEW CASES OF INJURY BY ACCIDENT RESULTING IN A TEMPORARY DISABILITY: OCCUPATION BY DURATION OF PERIOD OFF WORK AND AVERAGE PERIOD OFF WORK, N.S.W., 1986-87

				Duration	of period of	f work (com	pleted weeks	s)				
	Under 1	1	2	3	4-5	6-7	8-12	13-25	26-51	52 or more	411	Average period off
Occupation					(Numb	er of cases)					All cases	work (a) (weeks)
Professional, technical & related workers Administrative, executive & managerial	928	1,055	427	231	346	156	226	290	437	398	4,494	16.6
workers; and clerical workers	1,083	1,341	636	374	466	260	354	379	353	350	£ 50 <i>6</i>	12.0
Sales workers	652	915	383	214	264	150	200	234			5,596	13.9
Farmers, fishermen, timbergetters &					201	150	200	234	166	259	3,437	16.7
related workers	424	720	382	231	303	156	216	224	182	253	3,091	17.0
Miners, quarrymen & related workers	1,096	1,393	597	298	302	160	202	177	94	38	4,357	4.6
Workers in transport & communication	916	1,473	668	384	470	255	365	354	249	366	5,500	14.7
								,	21)	, 500	5,500	14.7
radesmen, production-process workers &												
labourers n.e.c.	10,975	14,774	6,108	3,207	3,958	2,199	2.061	0.000	0.070	2 422	<b>54.00</b>	
Millers, bakers, butchers, brewers &		,	0,100	3,207	2,330	4,199	3,061	2,963	2,270	3,422	52,937	14.0
related workers	655	1,036	360	172	191	105	161		105			
Metal workers, metal & electrical				1,2	171	103	101	144	105	183	3,112	12.4
production-process workers n.e.c.	717	951	390	200	233	142	209	208	101		0.545	10.0
Bricklayers, plasterers & construction				200	200	142	209	208	191	306	3,547	18.0
workers n.e.c.	369	543	266	137	172	96	152	161	126	100	2.221	45.4
Labourers n.e.c.	2,556	3,523	1,452	750	952	527	743	689	136 525	199	2,231	17.6
Machine toolmakers, metal machinists, etc. (b)	2,734	3,494	1,387	684	868	467	590	587	323 420	854 535	12,571	14.5
Other	3,944	5,227	2,253	1,264	1,542	862	1,206	1,174			11,766	10.6
			,	-,	1,572	802	1,200	1,1/4	893	1,345	19,710	14.8
ervice, sport & recreation workers	1,751	2,628	1,169	572	786	405	505					
	-,	-,020	2,107	312	780	405	597	634	751	1,060	10,353	19.0
'otal (c)	17 040	24.225										
	17,848	24,339	10,382	5,518	6,903	3,756	5,235	5,268	4,512	6,159	89,920	14.5

<sup>(</sup>a) Excludes cases with period off work greater than 10,000 calendar days. (b) Included in 'other' in previous issues of this publication. (c) Includes occupations not stated.

TABLE 5.3 NEW CASES OF OCCUPATIONAL DISEASE RESULTING IN A TEMPORARY DISABILITY: INDUSTRY BY DURATION OF PERIOD OFF WORK AND AVERAGE PERIOD OFF WORK, N.S.W., 1986-87

				Duration o	of period off	work (comp	oleted weeks	r)				<b>A</b>
Industry	Under 1	1	2	3	4-5 (Numbe	6-7 r of cases)	8-12	13-25	26-51	52 or more	All cases	Average period off work (a) (weeks)
Agriculture, forestry, fishing & hunting	7	33	30	20	15	20	18	21	28	80	272	56.8
Mining	18	25	4	3	- 8	2	4	7	4	24	99	50.0
Coal	10	12	1	2	5	2	4	4	2	1	43	6.8
Other	8	13	3	1	3	-	-	3	2	23	56	83.3
Manufacturing	220	435	228	141	179	156	219	315	293	991	3,177	62.7
Food, beverages & tobacco	73	151	84	37	50	40	61	68	56	202	822	50.2
Textiles, clothing & footwear	21	31	20	11	18	12	22	43	43	160	381	86.0
Wood, wood products & furniture	. 6	11	7	7	11	10	11	5	11	43	122	77.5
Paper, paper products, printing & publishing	11	25	16	11	15	15	15	16	14	67	205	68.9
Chemicals, petroleum & coal products	11	· 21	8	10	12	7	. 9	29	24	59	190	55.7
Non-metallic mineral products	12	15	6	5	5	6	7	11	6	36	109	58.5
Basic metal products	24	31	16	14	11	6	11	13	13	34	173	39.6
Fabricated metal products	24	41	13	17	14	13	24	29	22	68	265	53.9
Transport equipment	14	18	13	11	10	6	16	14	15	57	174	76.6
Other machinery & equipment	18	72	41	13	28	31	30	67	72	209	581	67.1
Miscellaneous manufacturing	6	19	4	5	5	10	13	20	17	56	155	72.1
Electricity, gas & water	17	21	17	12	7	5	12	4	10	9	114	20.5
Construction	32	91	39	20	47	27	39	37	47	102	481	44.6
Wholesale trade	19	37	22	10	24	10	20	38	23	77	280	49.0
Retail trade	45	90	44	23	43	32	33	57	65	140	572	45.6
Transport, storage & communication	22	36	21	12	23	20	18	17	20	37	226	32.5
Road transport	5	13	6	3	11	13	7	6	10	22	96	44.7
Other	17	23	15	9	12	7	11	11	10	15	130	23.6
Finance, property & business services	32	66	50	32	39	20	36	58	49	135	517	52.8
Public administration & defence	20	33	17	9	26	4	8	21	26	35	199	25.6
Community services	101	179	93	42	103	35	75	112	150	262	1,152	45.8
Health	49	84	50	22	48	16	33	49	73	115	539	44.0
Education, museum & library services	29	67	26	14	43	11	24	38	54	75	381	33.5
Other	23	28	17	6	12	8	18	25	23	72	232	70.4
Recreation, personal & other services	21	37	25	23	43	18	15	25	31	82	320	47.7
Total	554	1,083	590	347	557	349	497	712	746	1,974	7,409	52.8

<sup>(</sup>a) Excludes cases with period off work greater than 10,000 calendar days.

6

TABLE 5.4 NEW CASES OF OCCUPATIONAL DISEASE RESULTING IN A TEMPORARY DISABILITY: OCCUPATION BY DURATION OF PERIOD OFF WORK AND AVERAGE PERIOD OFF WORK, N.S.W., 1986-87

			· · · · · · · · · · · · · · · · · · ·	Duration o	f period off	work (comp	leted weeks	)				
	Under 1	1	2	3	4-5	6-7	8-12	13-25	26-51	52 or more	- All	Average period off work(a)
Occupation	(Number of cases)										cases	(weeks)
Professional, technical & related workers Administrative, executive & managerial workers;	39	88	45	18	49	15	30	48	56	89	477	38.8
and clerical workers	81	139	84	54	96	50	73	129	125	282	1,113	47.0
Sales workers	18	28	9	11	20	7	17	37	28	72	247	47.9
Farmers, fishermen, timbergetters &												
related workers	9	42	35	23	20	19	22	22	28	81	301	52.5
Miners, quarrymen & related workers	14	15	3	3	3	2	3	5	2	20	70	73.9
Workers in transport & communication	15	32	23	6	17	18	11	18	15	51	206	50.1
Tradesmen, production-process workers &												
labourers n.e.c.	298	611	311	181	262	202	280	374	370	1,136	4,025	56.4
Millers, bakers, butchers, brewers &				-0.	202					-,	•	
related workers	54	124	62	22	32	36	41	48	41	130	590	46.1
Metal workers, metal & electrical			~~		J <b>2</b>			,,,				
production-process workers n.e.c.	34	75	36	20	23	18	30	55	73	216	580	71.7
Bricklayers, plasterers & construction		,,,	, 50	20	23	10	50		,,,		200	, 211
workers n.e.c.	3	9	8	7	8	. 4	14	5	12	20	90	45.0
Labourers n.e.c.	59	108	74	31	55	28	47	51	45	114	612	35.8
Machine toolmakers, metal machinists, etc. (b)		93	36	26	33	37	47	56	47	132	549	56.2
Other (c)	106	202	95	75	111	79	101	159	152	524	1,604	63.1
.,	100	204	75	13		,,	101	157	132	324	1,004	05.1
Service, sport & recreation workers	79	127	80	50	89	35	59	. 77	121	238	955	51.9
Total (c)	554	1,083	590	347	557	349	497	712	746	1,974	7,409	52.8

<sup>(</sup>a) Excludes cases with period off work greater than 10,000 calendar days. (b) Included in 'other' in previous issues of this publication. (c) Includes occupations not stated.

6

TABLE 5.5 NEW CASES OF OCCUPATIONAL DISEASE RESULTING IN A TEMPORARY DISABILITY: NATURE OF DISEASE BY DURATION OF PERIOD OFF WORK AND AVERAGE PERIOD OFF WORK, N.S.W., 1986-87

				Duration	of period off	work (comp	oleted weeks	;)				
Nature of disease	Under 1	1	2	3	4-5 (Numbe	6-7 r of cases)	8-12	13-25	26-51	52 or more	Total number of cases	Average period off work (a) (weeks)
Infective & parasitic diseases	48	103	61	27	29	14	15	14	15	27	353	20.4
Neoplasms	7	8	8	2	8	1	2	1	4	2	43	10.7
Mental disorders	15	25	18	12	28	10	24	30	52	106	320	74.5
Deafness	1	-	-	• •		-	-	-	-	-	1	.6
Other diseases of the nervous												
system & sense organs	26	38	23	9	21	12	20	26	27	56	258	46.6
Diseases of the circulatory												
system	4	7	3	1	10	6	7	22	18	59	137	94.5
Diseases of the respiratory	•											
system	12	22	13	5	15	4	9	15	15	51	161	58.2
Diseases of the digestive												
system Diseases of the genito-	. 5	15	7	5	51	78	69	46	26	26	328	17.2
urinary system	-		- '	-		-	-	1	-	2	3	161.6
Diseases of the skin												
& subcutaneous tissue Tenosynovitis, bursitis	151	257	97	60	71	34	39	38	41	60	848	15.2
& synovitis	07	225	100	00	404		404					
Other diseases of the musculoskeletal system	87	225	128	83	136	64	104	138	211	430	1,606	50.2
& connective tissue	185	363	224	140	187	124	200	367	326	1,145	3,261	68.3
Other(b)	13	20	8	3	1	2	8	14	11	10	90	33.6
Total	554	1,083	590	347	557	349	497	712	746	1,974	7,409	52.8

<sup>(</sup>a) Excludes cases with period off work greater than 10,000 calendar days. (b) Includes diseases not classified for lack of sufficient data.

TABLE 5.6 NEW CASES OF EMPLOYMENT INJURIES: INDUSTRY BY TYPE OF OCCURRENCE AND TOTAL AND AVERAGE COMPENSATION PAYMENTS, N.S.W., 1986-87

•	Injuries	by accident	Occupatio	nal diseases	Employn	nent injuries
Industry	Total compensation payments(a)	Average compensation payments	Total compensation payments(a)	Average compensation payments	Total compensation payments(a)	Average compensation payments
				\$'000		
Agriculture, forestry, fishing & hunting	17,739.6	6.8	3,477.1	10.6	21,216.8	7.2
Mining	53,677.7	8.3	3,167.6	4.0	56,845.3	7.8
Coal	49,361.3	8.8	1,719.9	3.4	51,081.2	8.4
Other	4,316.4	5.0	1,447.7	4.9	5,764.1	5.0
Manufacturing	167,606.6	6.2	56,180.5	9.0	223,787.1	6.7
Food, beverages & tobacco	25,202.8	4.9	9,295.7	9.0	34,498.5	5.6
Textiles, clothing & footwear	11,296.7	9.6	8,134.6	17.0	19,431.3	11.7
Wood, wood products & furniture	13,068.1	7.2	2,426.9	11.2	15,495.1	7.6
Paper, paper products, printing &	•				,.,	
publishing	10,446.0	6.4	3,542.1	11.0	13,988.1	7.2
Chemicals, petroleum & coal products	8,710.6	6.8	3,333.7	11.3	12,044.3	7.6
Non-metallic mineral products	10,254.4	7.9	3,499.6	13.6	13,754.0	8.9
Basic metal products	17,142.1	5.6	3,483.5	2.9	20,625.7	4.9
Fabricated metal products	20,357.1	5.5	4,079.0	7.0	24,436.1	5.7
Transport equipment	15,759.9	6.6	4,378.1	5.5	20,138.0	6.3
Other machinery & equipment	26,260.0	5.8	11,202.4	12.4	37,462.5	6.9
Miscellaneous manufacturing	9,109.0	7.9	2,804.7	13.2	11,913.7	8.7
Electricity, gas & water	10,809.9	3.3	1,293.6	2.4	12,103.6	3.2
Construction	73,232.6	5.8	7,768.4	6.5	81,001.0	5.8
Wholesale trade	26,769.0	6.2	5,007.0	12.4	31,776.0	6.7
Retail trade	37,518.1	5.0	7,000.6	10.7	44,518.8	5.4
Transport, storage & communication	40,593.1	6.4	4,750.6	5.5	45,343.7	6.3
Road transport	20,527.7	7.3	2,587.8	15.3	23,115.5	7.7
Other	20,065.4	5.8	2,162.8	3.1	22,228.2	5.3
Finance, property & business services	20,299.8	5.7	8,140.4	14.1	28,440.2	6.9
Public administration & defence	7,053.1	4.1	1,780.2	7.5	8,833.4	4.5
Community services	56,088.9	4.7	13,444.7	10.5	69,533.5	5.3
Health	36,094.2	5.3	4,618.7	8.0	40,712.9	5.5
Education, museum & library services	7,973.8	3.5	4,343.2	10.2	12,316.9	4.6
Other	12,020.9	4.3	4,482.7	16.3	16,503.7	5.4
Recreation, personal & other services	24,632.1	6.4	4,601.8	12.8	29,233.9	7.0
Гotal	536,020.7	5.9	116,612.6	8.6	652,633.2	6.2

<sup>(</sup>a) Totals may not equal the sum of the component items due to rounding.

TABLE 5.7 EMPLOYMENT INJURIES: YEAR OF PAYMENT - INDUSTRY BY TYPE OF OCCURRENCE AND TOTAL AND AVERAGE COMPENSATION PAYMENTS, N.S.W., 1986-87

•	Injuries i	by accident	Occupatio	nal diseases	Employment injuries			
Industry	Total compensation payments(a)	Average compensation payments	Total compensation payments(a)	Average compensation payments	Total compensation payments(a)	Average compensation payments		
				\$'000				
Agriculture, forestry, fishing & hunting	26,923.9	4.8	2,739.2	3.7	29,663.1	4.6		
Mining	59,410.3	3.9	3,801.0	1.9	63,211.3	3.7		
Coal	46,058.5	3.5	2,746.0	1.9	48,804.5	3.3		
Other	13,351.8	6.8	1,055.0	1.9	14,406.8	5.7		
Manufacturing	307,059.4	4.9	68,965.7	4.0	376,025.1	4.7		
Food, beverages & tobacco	46,339.0	4.2	12,918.3	4.6	59,257.3	4.3		
Textiles, clothing & footwear	16,555.2	5.2	8,795.9	5.4	25,351.1	5.3		
Wood, wood products & furniture	19,872.0	4.7	2,048.2	3.6	21,920.2	4.6		
Paper, paper products, printing &	•							
publishing	15,421.2	4.1	4,277.7	4.3	19,698.9	4.1		
Chemicals, petroleum & coal products	15,137.7	4.6	4,677.3	4.6	19,815.0	4.6		
Non-metallic mineral products	18,922.0	5.9	2,495.4	3.6	21,417.4	5.4		
Basic metal products	43,349.6	6.3	5,770.6	2.7	49,120.2	5.4		
Fabricated metal products	41,109.1	4.9	6,665.4	4.0	47,774.4	4.7		
Transport equipment	26,012.3	5.1	3,970.8	2.2	29,983.1	4.3		
Other machinery & equipment	49,318.8	4.6	14,211.8	4.6	63,530.6	4.6		
Miscellaneous manufacturing	15,022.4	5.1	3,134.3	4.1	18,156.8	4.9		
Electricity, gas & water	24,129.2	4.0	1,656.2	1.8	25,785.5	3.7		
Construction	121,816.0	4.6	6,670.6	2.5	128,486.6	4.4		
Wholesale trade	34,569.5	3.7	4,270.8	3.6	38,840.2	3.7		
Retail trade	51,403.0	3.4	8,021.6	4.4	59,424.6	3.5		
Transport, storage &								
communication	50,682.0	4.2	4,064.5	2.2	54,746.5	3.9		
Road transport	26,443.7	4.5	1,706.7	4.1	28,150.3	4.5		
Other	24,238.3	3.9	2,357.8	1.7	26,596.2	3.5		
Finance, property & business services	27,428.9	3.5	9,770.3	4.5	37,199.2	3.7		
Public administration & defence	8,881.2	2.7	2,429.0	2.8	11,310.2	2.7		
Community services	86,741.0	3.4	14,316.5	3.8	101,057.5	3.5		
Health	59,207.5	3.9	7,055.4	4.1	66,263.0	4.0		
Education, museum & library services	-	2.4	4,081.4	3.2	15,860.3	2.5		
Other	15,754.7	2.9	3,179.6	4.1	18,934.3	3.0		
Recreation, personal & other services	30,484.1	3.7	3,448.7	3.4	33,932.8	3.7		
Total	829,528.4	4.2	130,157.8	3.6	959,686.3	4.1		

<sup>(</sup>a) Totals may not equal the sum of the component items due to rounding.

#### **TECHNICAL NOTE 1**

# CALCULATION OF THE INCIDENCE OF EMPLOYMENT INJURIES

# Estimation procedure

The incidence of employment injuries is the number of employment injuries expressed as a rate per 1,000 workers exposed to risk. That is, it is calculated for males, females and persons, according to the following formula:

 $\frac{\text{number of injuries}}{\text{number of workers}} \times 1,000$ 

- 2. Separate incidence statistics have been calculated in this publication for:
  - a. all employment injuries (Section 1);
  - b. employment injuries resulting from accidents (Section 1);
  - c. employment injuries resulting from workplace accidents (Sections 1 and 2);
  - d. employment injuries resulting from road traffic accidents (Section 3); and
  - e. occupational diseases (Sections 1 and 4).

For each of these categories, separate industry incidence statistics have also been calculated, with a further dissection by sex in the case of Sections 2, 3 and 4.

- 3. In previous years, separate occupation incidence statistics were also calculated. However, for 1986-87, it is not possible to match the number of injuries in each occupation (numerator) with the number of workers in each occupation (denominator) because different classifications were used. While injuries were classified on the basis of CCLO, workers were classified using ASCO, and it is therefore not possible to calculate incidence by occupation.
- 4. Ideally, the number of workers included in the denominator calculations should be the average annual number of workers that could potentially suffer an employment injury (as covered by the scope of the N.S.W. Workers' Compensation Statistical Collection). This would be best achieved, theoretically, by taking the average monthly employment reported by establishments covered by the workers' compensation system, classified by industry and occupation in precisely the same way as the workers figuring in the numerator. This denominator would then be applied to the workers' compensation data to produce incidence statistics. However, data on the number of injuries and the number of workers are not available from this one data source. Therefore, certain adjustments are

required to match as closely as possible the scope of the data included in the numerator and the denominator.

# Adjustments

- 5. Employment injuries and employees of the State Rail Authority and the Urban Transit Authority have been excluded from the incidence calculations, as claims by employees of these organisations are generally made under the Transport Authorities Act rather than the (N.S.W.) Workers' Compensation Act.
- 6. Data on employed wage and salary earners obtained from the monthly labour force survey (LFS) have been used as the basis for the calculation of the number of workers. These data have been adjusted as far as possible to match the scope of the adjusted workers' compensation data. The adjustments which have been made to the LFS data are:
  - a. exclusion of Commonwealth employees;
  - b. exclusion of SRA and UTA employees; and
  - c. exclusion of members of the N.S.W. Police Force.
- 7. These adjustments can result in all or most of the employees in a given industry being excluded from the number of workers used as denominator data. For 1986-87 data, where this has been the case, the entire industry has been excluded from the incidence calculations. The industries affected are Rail transport, Services to air transport and Communication. The approach adopted represents a change from previous procedures and thus introduces a break in the series. The footnoted incidence data should not be directly compared with those published in earlier issues of *Employment Injuries*.
- 8. To further match the scope of the workers' compensation and LFS data, the following adjustments should also have been made to the LFS data:
  - inclusion of that part of the self-employed category of workers who are deemed as workers under the Workers' Compensation Act; and
  - exclusion of that portion of casual employees not covered by the Workers' Compensation Act.

These adjustments could not be applied to the (adjusted) LFS data because of the unavailability of the necessary data to effect them.

# **TECHNICAL NOTE 2**

# RELIABILITY OF THE DATA

The data contained in this publication are subject to error arising from a number of possible sources, as well as being constrained by some conceptual limitations.

# Non-sampling errors

2. The reliability of both the number of injuries and the number of workers data used to calculate incidence is affected by non-sampling errors. These may arise as a result of errors in the reporting, recording or processing of the data, and can occur in any type of statistical collection, whether a sample or the complete population is enumerated.

# Non-sampling errors can be introduced through:

- (a) Inadequacies in the questionnaire. For example, the inclusion of ambiguous or unclear questions, questions which request information which is not readily available to respondents, and questions on sensitive topics.
- (b) Non-response or omitted cases. In the labour force survey, this could occur because a respondent could not be contacted or refused to be interviewed. In the case of injuries data, it could happen if an insurer failed to report certain workers' compensation claims, for example, or if claims were inadvertently omitted from the processing system. This would bias the results if the characteristics of the non-respondents or the omitted cases were different from those of respondents or reported cases.
- (c) Inaccurate reporting by respondents or insurers. Respondents to the labour force survey may unwittingly provide incorrect information because they incorrectly recall details such as when an event occurred or how it occurred. They may also deliberately give an inaccurate answer because a question is in some way sensitive for them. Problems of inaccurate reporting can also affect injuries data at two points in the collection process: when the injured worker completes a claim form for workers' compensation insurance, and when the insurer in turn reports the injury to the Board.
- (d) Errors in collection procedures. For example, incorrectly identifying the target population so that information is collected from the wrong household or persons. Insufficient training of interviewers or insurers can also give rise to errors, such as the use of incorrect forms, or incorrect interpretation of questions, leading to inconsistent procedures and incorrect definitions being applied.
- (e) Incorrect recording of answers. This may occur, for example, because an interviewer misinterprets a respondent's answer or through a clerical error.

- (f) Errors in data entry and processing. Examples are the incorrect coding of occupation or industry in both the labour force survey and in the workers' compensation data. Changes in administrative practices, such as in the allocation of an injury to 'permanent' or 'temporary', can also result in sudden changes in the level of injuries in particular categories.
- 3. It is difficult to measure the size of the non-sample errors: their significance could vary considerably from survey to survey and even from question to question. Every effort is made to minimise the effects of these errors. For example, labour force survey questionnaires are tested in order to ensure that the questions are clear and can be answered reliably by respondents, interviewers are given comprehensive training and instructions, and selected dwellings are visited a number of times if necessary to contact respondents. Workers' compensation forms are closely checked for consistency and accuracy, coding is carefully monitored, and data are subject to computer edits.

# Sampling errors

- 4. The estimates of number of employees by industry which are used to calculate incidence are obtained from the ABS labour force survey. Because this is a sample survey, the estimates are subject to sampling errors, that is, the errors which occur by chance because the data were only obtained from a sample, not the entire population. One measure of the extent of this variability is the standard error.
- 5. The standard errors for the LFS estimates can be used to provide a measure of the sampling errors associated with the incidence of injuries. One way of expressing the error for the rates is by calculating the relative standard errors (RSEs), which are the standard errors expressed as a percentage of the estimates.
- 6. The table at the end of this Technical Note presents the relative standard errors for males, females and persons by broad industry categories. RSEs at the detailed industry level appear in Table 1.7. Rates with an RSE of 25 per cent or less are regarded as sufficiently reliable for most purposes. Rates associated with an RSE of more than 25 per cent and up to 50 per cent have been marked with an asterisk (\*) and should be used with caution. Rates with an RSE higher than 50 per cent have not been included in this publication because of their unreliability. They have been replaced with a double asterisk (\*\*).
- 7. The implications of the RSEs are as follows: there are two chances in three that the true incidence rate is within the range Rate  $\pm$  RSE% x Rate, and there are nineteen chances in twenty that the true rate is in the range Rate  $\pm$  2 x RSE% x Rate. Whilst the standard error increases as the size of the estimate increases, the relative standard error will decrease, so that larger estimates are relatively more reliable than smaller ones. In the case of incidence, the size of the RSE is a function of the size of the labour force estimate of workers on which the rate is based, not the size of the rate itself or the number of injuries (which is not subject to sampling error).

#### Example

The incidence of employment injuries in the Construction industry is 123.5 and the RSE of this rate is 3.7 per cent. Therefore, there are two chances in three that the true rate is in the range:

 $123.5 \pm 3.7 \% \times 123.5$  or 118.9, 128.1

There are nineteen chances in twenty that the true rate is in the range:

 $123.5 \pm 2 \times 3.7\% \times 123.5$  or 114.4, 132.6.

# Other methodological shortcomings

- 10. The quality of the incidence statistics depends upon the degree and extent of the difference between the scope of the workers' compensation and LFS data, as well as on the reliability of these data.
- 11. The most significant difference in the scope of the workers' compensation and LFS data is in the treatment of self-employed persons deemed as workers under the Workers' Compensation Act. Injuries to these workers are included in the number of injuries but the workers in this category are excluded from the number of workers. The effect of this difference in

scope is unevenly distributed amongst the different industries and occupations, as certain industries (such as Construction and Road transport) and occupations (such as construction - related occupations and workers involved in transport) have a far higher proportion of self-employed persons. The non-inclusion of these persons in the number of workers data means that their relevant incidences will be higher than would have been the case if that group of self-employed persons who are covered by the Workers' Compensation Act had been included in the number of workers data. This effect will obviously be greater for those industries and occupations with the higher proportions of these self-employed persons.

12. Another issue worth noting is that, as mentioned in Technical Note 1, LFS data on numbers of workers need to be adjusted to exclude those employees who are not covered by the provisions of the (N.S.W.) Workers' Compensation Act. Because these workers cannot be directly identified using LFS data, numbers of employees working for the State Rail Authority, the Urban Transit Authority, etc are obtained from the Survey of Employee Earnings (SEE). These two sources differ in a number of significant aspects such as scope, concepts and definitions, and collection methodology. Using estimates from one to adjust estimates from the other is therefore a practical compromise, where lack of more suitable data does not permit a conceptually superior method to be adopted.

# RELATIVE STANDARD ERRORS OF INCIDENCE BY INDUSTRY AND SEX (Per cent)

Industry	Males	Females	Persons
Agriculture, forestry, fishing & hunting	8.0	17.6	7.1
Mining	8.3	40.0	8.0
Coal	9.9	62.5	9.7
Other	17.4	51.8	16.3
Manufacturing	2.1	3.9	1.7
Food, beverages & tobacco	6.7	11.9	5.6
Textiles, clothing & footwear	12.8	9.2	7.2
Wood, wood products & furniture	9.9	24.9	9.0
Paper, paper products, printing & publishing	8.3	11.2	6.4
Chemicals, petroleum & coal products	10.8	17.3	8.8
Non-metallic mineral products	11.5	33.1	10.7
Basic metal products	7.1	27.8	6.7
Fabricated metal products	7.7	18.8	6.9
Transport equipment	10.6	34.9	10.0
Other machinery & equipment	6.6	11.3	5.5
Miscellaneous manufacturing	12.2	19.0	9.9
Electricity, gas & water	6.4	19.8	6.0
Construction	4.0	14.1	3.7
Wholesale trade	3.9	6.5	3.2
Retail trade	3.5	3.2	2.2
Transport, storage & communication	8.6	13.4	6.9
Road transport	7.8	20.6	7.1
Other	16.6	23.3	12.7
Finance, property & business services	3.9	3.7	2.5
Public administration & defence	6.5	13.1	5.6
Community services	3.6	2.3	1.8
Health	7.5	3.7	3.1
Education, museum & library services	5.4	4.1	3.0
Other	9.4	7.1	5.4
Recreation, personal & other services	5.9	4.8	3.5
Total	1.0	1.2	0.7